

**SECOR INTERNATIONAL INCORPORATED**

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www.secor.com

**l e t t e r o f t r a n s m i t t a l**

attention: Mr. Mike Shepherd date: February 20, 2007  
company: United States Environmental Protection Agency  
address: Seattle Regional Office  
1200 Sixth Avenue, OCE-082  
Seattle, Washington 98101  
project: ConocoPhillips #256357 (RMR #2926) at 3323 Marine Drive Northeast,  
Marysville, Washington  
job number: 01CP.02926.00  
re: Subsurface Investigation Report

## enclosed:

<input type="checkbox"/> Proposal	<input type="checkbox"/> As Requested
<input type="checkbox"/> Contract	<input checked="" type="checkbox"/> Review
<input checked="" type="checkbox"/> Report	<input type="checkbox"/> Your Information
<input type="checkbox"/> Letter	<input type="checkbox"/> Approval
<input type="checkbox"/> Work Plan	<input type="checkbox"/> Signature
	<input type="checkbox"/> Return
	<input type="checkbox"/> Other:

comments: Attached is the Subsurface Investigation Report for ConocoPhillips Site No. #256357 at 3323 Marine Drive Northeast, Marysville, Washington. If you have any questions or comments, feel free to contact me at 425-372-1659 or [khanson@secor.com](mailto:khanson@secor.com) or Marc Sauze at 425-636-6210 or [msauze@secor.com](mailto:msauze@secor.com).

Thank you,

  
signator: Katlin Hanson  
title: Project Geologist

cc: project file





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January 24, 2007

Mr. Michael Noll  
DXT SERVICES LLC  
Approved Service Provider of ConocoPhillips  
Risk Management & Remediation  
11921 – 185<sup>th</sup> Avenue SE  
Snohomish, WA 98290

RE: Subsurface Investigation  
ConocoPhillips Site No. 256357 (RMR #2926)  
3323 Marine Drive Northeast, Marysville, Washington  
SECOR Project No.: 01CP.02926.00

Dear Mr. Noll:

The following presents the results of a subsurface investigation performed by SECOR International, Inc. (SECOR) between August 8<sup>th</sup> and August 10<sup>th</sup>, 2006 at ConocoPhillips Facility No. 256357, located at 3323 Marine Drive Northeast, Marysville, Washington (site). The purpose of the investigation was to assess subsurface soil and groundwater quality in or near the areas where soil impacts had been previously identified in October 1995 and January 2005 and to evaluate soil and groundwater quality at the northeast, southeast and southwest corners of the site. The work plan was reviewed and approved by Mr. Michael Shepherd (regulatory representative for the United States Environmental Protection Agency (EPA)).

The results of the investigation are presented below.

### SITE DESCRIPTION

The site is located in unincorporated Snohomish County and on Tulalip Tribes Reservation land. It is specifically situated southwest of the intersection of Marine Drive and 33rd Avenue Northeast and west of an Interstate 5 off-ramp, in Marysville, Washington (Figure 1). The site is also described as being located in Section 29 of Township 30 North, Range 5 East of the United States Geological Survey (USGS), Marysville, Washington 7.5-minute topographic quadrangle. The surrounding area consists of a mix of commercial establishments and vacant land. A McDonald's restaurant and hotel establishment border the site immediately to the north and a parking lot is situated to the west. A vacant lot is located across Marine Drive to the south.

The site includes a convenience store, four pump islands covered with a canopy, and two gasoline underground storage tanks (USTs). The remainder of the site is covered with asphalt or concrete except for landscaped areas. The site is located at an elevation of 24 feet above mean sea level. The site topography is generally level, although slight gradations exist, allowing surficial drainage towards catch basins for storm water management. Regional topography in the vicinity of the site is also relatively flat with a general topographic gradient towards the south. Quilceda Creek and Sturgeon Creek are located 0.27 miles northwest and 0.5 miles west of the site, respectively.

## BACKGROUND

SECOR's understanding of the site's background is limited to an overview of UST removal activities completed in 1995 and supervised by GeoEngineers, Inc., conclusions from a sensitive receptor survey conducted by SECOR International, Inc. (SECOR) in October 2004 and excavation activities supervised by SECOR related to a hydraulic hoist removal in January 2005.

GeoEngineers, Inc. supervised the removal of two steel 10,000-gallon gasoline USTs, two steel 550-gallon heating oil and waste oil USTs, and product lines and fuel dispensers in September and October 1995. The results of these activities are referenced in the report titled *Report of Environmental Services, Underground Storage Tank Removal Monitoring, Unocal Service Station 6357, Marysville, Washington for Unocal ERS - West Region* dated February 16, 1996. GeoEngineers personnel obtained ten soil samples from the limits of the combined former steel gasoline, heating oil and waste oil UST excavation, and beneath the former product lines and fuel dispensers. Gasoline range hydrocarbons were detected at a concentration greater than the Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Method A cleanup level in soil sample, SWC-10.5, collected from the southwest corner of the excavation at a depth of approximately 10.5 feet. BTEX concentrations were detected in the sample below the MTCA Method A cleanup levels. Diesel and heavy oil range hydrocarbons were detected at concentrations less than the MTCA Method A cleanup levels. Benzene, toluene, ethylbenzene, and total xylenes (BTEX), gasoline range hydrocarbons, diesel and heavy oil range hydrocarbons were not detected in the other 8 samples collected and submitted for analysis.

Gasoline range hydrocarbons, toluene and total xylenes concentrations were detected at levels above the MTCA Method A cleanup levels in soil sample, FI1-1-3.5. This soil sample was collected from beneath the product line elbow at the north end of the westernmost pump island at a depth of 3.5 feet below grade. The sample location was overexcavated and a second soil sample was collected 2 feet deeper, at 5.5 feet below grade. Gasoline range hydrocarbons and BTEX concentrations did not exceed the MTCA Method A cleanup levels in soil sample, FI1-1-5.5. A test pit was excavated to 12.5 feet below grade at the location of the new gasoline USTs to evaluate soil and ground water conditions. Groundwater seepage occurred in the test pit at approximately 12 feet below grade. A groundwater sample collected from within the test pit did not contain petroleum hydrocarbons above the MTCA Method A cleanup levels. Approximately 70 cubic yards of impacted soil from the UST excavation and 180 cubic yards of clean soil from the replacement UST excavation were removed offsite for landfill disposal. Approximately 850 gallons of groundwater from the replacement UST excavation were tested and discharged to a storm drain at the site. Soil from the replacement UST excavation was placed and compacted in the former UST excavation. A 6-inch thick concrete slab was poured to achieve final grade at the location of the former USTs. The replacement fiberglass USTs and product lines were installed in the test pit location in October 1995.

Confirmatory soil sampling was conducted by SECOR personnel during the removal of a single hydraulic hoist in July 2002 and results are described in the report titled *Summary Report - Hydraulic Hoist Removal for TOSCO Facility No. 256357, 3323 Marine View Drive, Marysville,*

Washington dated October 9, 2002. Two confirmatory soil samples were collected from the middle of the hoist excavation, approximately 8.5 feet below grade. Diesel range organics, heavy oil range organics, Aroclor 1254 (a polychlorinated biphenyl), arsenic, barium, chromium and lead were detected in both samples but at concentrations below the MTCA Method A cleanup levels.

According to a sensitive receptor survey performed by SECOR in November 2004 and described in the report titled *Sensitive Receptor Survey, ConocoPhillips Site No. 6357, November 3, 2004*, there are sensitive receptors within a ½-mile radius including surface water bodies, wetlands, both Marysville Junior and Senior High Schools, utility vaults and water wells. Marysville Junior High School and Marysville High school are located approximately 0.65 miles east-northeast of the site. Quilceda Creek is the only major surface water body located within ½-mile radius of the site and is west of the site. According to the Ecology Well Logs Database, four water supply wells and 78 resource protection wells are located within ½-mile radius of the site. A well log search performed by Environmental Data Resources, Inc., identified one well within the ½-mile search radius after a search of the federal FRDS Public Water Supply System Information. This well is located approximately 0.42 miles east of the site. The well log search also produced information for 10 USGS wells located north and northwest of the site and within 1/2-mile of the site.

In January 2005, SECOR personnel sampled soils during the removal of a hydraulic hoist from the north service bay of the three service bays located in the station building at the site. Results from these activities are referenced in the report titled, *Summary Report, Hydraulic Hoist Removal, ConocoPhillips Facility No. 256357, February 28, 2005*. The hoist excavation was located on the north end of the service bay area approximately three feet from the north wall of the building. After the hoist was removed and found to be in generally good condition, the excavation was extended to 8 feet below grade. One confirmatory soil sample, EX-1, was collected from approximately eight feet below grade at the base of the hoist excavation. This sample had a diesel range hydrocarbon concentration of 130 mg/kg and a heavy oil range hydrocarbon concentration of 2300 mg/kg.

Since the concentration exceeded the MTCA Method A cleanup level for heavy oil hydrocarbons in the sample collected from the vertical limit of the excavation, the excavation was deepened to remediate impacted soils and collect a confirmatory sample from a deeper depth. None of the second round of samples had detectable concentrations of diesel range hydrocarbons. The soil sample, Bottom, collected at 10.5 feet below grade had a heavy oil range hydrocarbon concentration of 4700 mg/kg. The North Wall sample, collected 9 feet below grade along the north excavation sidewall, had a heavy oil range hydrocarbon concentration of 980 mg/kg. The West Wall sample, collected 9 feet below grade along the west sidewall, had a heavy oil range hydrocarbon concentration of 640 mg/kg. The sampling results showed that impacted soils were present directly beneath the hoist cylinders with little lateral migration and residual heavy oil range hydrocarbons were present in the sandy soils. A total of 14.33 tons of impacted soil was removed from the hoist excavation and the excavation was backfilled with 13.75 tons of clean pea gravel. The service bay area is currently operated as a convenience store.

SECOR recommended the additional well installations based on the following:

- Gasoline range hydrocarbons were detected at a concentration greater than the MTCA Method A cleanup level in soil sample, SWC-10.5, collected from the southwest corner of the combined former steel gasoline, heating oil and waste oil UST excavation in October 1995;
- Gasoline range hydrocarbons, toluene and total xylenes concentrations were detected at levels above the MTCA Method A cleanup levels in soil sample, FI1-1-3.5 collected from beneath the product line elbow at the north end of the westernmost pump island at a depth of 3.5 feet below grade in October 1995;
- The sampling results from the January 2005 hoist excavation showed that impacted soils were present directly beneath the hoist cylinders with little lateral migration and residual heavy oil range hydrocarbons were present in the sandy soils; and
- Lack of soil and groundwater data for the site and for lateral migration of previously encountered soil impacts.

The scope of work completed is detailed below.

### **SCOPE OF WORK**

The scope of work, performed on August 8<sup>th</sup> to August 10<sup>th</sup>, 2006, included installation of eight borings (SB-1 through SB-8) and their completion as eight monitoring wells (labeled MW-1 through MW-8) as described in SECOR's work plan dated September 30, 2005. The wells were installed to a maximum depth of 20 feet below grade. The well completion depths and screen placement were chosen based on field observations during drilling.

### **FIELD ACTIVITIES**

Cascade Drilling Inc. (Cascade) provided drilling services and Applied Professional Services, Inc. (APS) provided private utility locating services. SECOR personnel were present during all phases of the fieldwork. Details regarding fieldwork are described as follows:

- Preparing a project-specific Health and Safety Plan (HASP);
- Marking the well locations, notifying the municipal Utility Notification Center, and hiring a private utility locator to identify any potential conflicts with existing underground utilities;
- Using an air wand and vacuum truck to clear the borings to 5 feet below grade;
- Advancing 8 borings and completing them as 2-inch diameter groundwater monitoring wells at the locations shown on Figure 2;
- Collecting soil samples at approximate 5-foot intervals for purposes of logging subsurface conditions, field screening soil samples for organic vapors using a photo-

ionization detector (PID), and submitting selected soil samples for laboratory analysis;  
and

- Preparing a report of the site investigation activities.

### **Drilling and Sampling Activities**

SECOR directed the drilling and installation of eight monitoring wells using an 8-inch diameter, hollow-stem auger rig. Monitoring wells were installed in the following areas to further characterize soil and groundwater onsite:

- Monitoring well MW-1, was installed north outside of the station building. Soil borings could not be drilled inside the building because the three service bays with hoists were removed and a convenience store was constructed in their place.
- Monitoring wells MW-2 and MW-3 were installed east of the convenience store building in or near the boundaries of the October 1995 excavation.
- Monitoring well MW-4 was installed in the planter located at the southeast corner of the site.
- Monitoring well MW-5 was installed in the planter located at the southwest corner of the site.
- Monitoring well MW-6 was installed west and outside of the station building near the side containing the former Service Bay #1, #2 and #3 hydraulic hoists.
- Monitoring well MW-7 was installed on the east side of the north end of the westernmost fuel dispenser in the area where soil sample, FI1-1-3.5, was collected.
- Monitoring well MW-8 was installed near the northeast corner of the site.

During borehole advancement, soil samples were collected at 5 foot intervals from the ground surface through the total extent of the boring for visual inspection, lithologic description, and field screening for the presence of volatile organic compounds. Augers and samplers were decontaminated between borings to prevent cross-contamination. Soil samples were obtained using a split-spoon sampler and collected directly into laboratory supplied jars. For the EPA 5035A samples, soil was collected using a laboratory supplied sampler and placed into laboratory supplied containers preserved with methanol. All soil samples were immediately placed in an iced cooler under chain-of-custody documentation pending transportation to the laboratory. All samples were uniquely labeled.

A portion of the recovered soil was placed into small, re-sealable plastic bags and vapors were allowed to equilibrate for approximately 10 minutes. A photo ionization detector (PID) was then used to monitor the vapors contained within the plastic bag for volatile organic compounds (VOCs). Results of these readings were recorded on the boring logs. The PID was equipped with an ultraviolet lamp of 10.8 electron volts (eV) and calibrated to a 100 parts per million isobutylene standard.

A physical description of the soil types encountered at each sampling location was recorded on boring logs in general accordance with the unified soil classification system (USCS). Boring logs are presented in Attachment A.

### **Subsurface Conditions**

Soils encountered during the drilling activities generally consisted of tan silty sands and tan to grayish brown sands with trace fine rounded gravels to the maximum drilled depth of 20 feet. Groundwater was initially encountered at depths between 11.40 to 14 feet in the eight borings prior to monitoring well construction. Static groundwater levels in the new monitoring wells ranged between 11.05 feet below grade (MW-5) to 12.70 feet below grade (MW-8).

### **Monitoring Well Installation**

Well construction consisted of placement of a screened interval from the bottom of the boring to 7 feet below grade in all the wells except MW-1 where the top of the screened interval was at 10 feet below grade using 0.01-inch machine slotted, 2-inch diameter, flush-threaded, Schedule 40 PVC. Blank 2-inch diameter, Schedule 40 PVC was used to complete the each well to ground surface. The annular space around the screen was filled with 10/20 Colorado sand from the bottom of the boring to approximately 2 feet above the top of the screen. Hydrated bentonite chips were then used to fill the annular space to within approximately 2 feet below grade. A traffic-rated monument was secured flush with ground surface using concrete. The wells were completed at depths of 17 feet (MW-2, MW-3, MW-6), of 18 feet (MW-4, MW-5, MW-7, MW-8) and of 20 feet (MW-1). Details of the monitoring well construction are provided in the boring logs in Attachment A.

### **Monitoring Well Development**

After the wells were installed, the wells were developed by purging each well with a downhole pump. The wells were purged until the amount of suspended sediment in the purge water decreased significantly and the water appeared clear. Approximately 20 to 30 gallons of purge water were removed from each of the monitoring wells.

### **Groundwater Sampling Activities**

Groundwater samples were collected from all eight monitoring wells on August 24, 2006. Prior to collecting groundwater samples from the eight monitoring wells, static water levels were obtained by slowly lowering an electronic water level indicator into each respective well until the instrument indicated that the groundwater surface had been encountered. The measurement was made from the top of each respective casing to within the nearest 0.01 foot. Approximately 3 well casing volumes of groundwater were removed from each well, using a downhole pump and dedicated tubing prior to sampling.

Measurements of the groundwater including turbidity, color, oxidation-reduction potential (ORP), pH, temperature, conductivity, and odor were recorded. All the groundwater samples had low turbidity and were clear. The ORP ranged from 120 mV (MW-3) to 232 mV (MW-2). The pH ranged from 6.34 (MW-6) to 7.08 (MW-7). The temperature ranged from 16.45 to 18.27

Celsius. The conductivity ranged from 0.224 to 0.402 Siemens per meter. After three series of measurements varied by less than 10 percent, groundwater samples were then collected using a peristaltic pump with new disposable silicon tubing connected to the dedicated tubing in the well. Groundwater samples were collected directly into laboratory supplied containers and immediately placed in an iced cooler under chain of custody documentation.

### **Soil Analytical Program**

The soil samples were submitted to Lancaster Laboratories, Inc. in Lancaster, Pennsylvania for chemical analysis. Soil samples were selected for analysis from each boring based on field observations including color, depth, PID readings, and depth to groundwater.

Each selected soil sample was submitted for selected analyses for constituents listed in Table 830.1 "Required Testing for Petroleum Releases" in the Ecology's MTCA cleanup Regulation (Ch. 173-340 WAC) including total petroleum hydrocarbons as gasoline (TPH-g) using Northwest Method NWTPH-Gx, diesel range organics and heavy range organics using Northwest Method NWTPH-Dx Modified with Silica Gel Cleanup, and benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA Method 8021B. Two samples MW-2@10' and MW-7@10' were submitted for additional analyses including dibromoethane (EDB), dichloroethane (EDC), polycyclic aromatic hydrocarbons (PAHs), volatile petroleum hydrocarbons (VPH), extractable petroleum hydrocarbons (EPH), methyl tertiary-butyl ether (MTBE), naphthalene, and total lead.

Soil sample MW-2@10' was submitted for additional analyses including halogenated volatile organic compounds (HVOCs) and polychlorinated biphenyls (PCBs).

### **Groundwater Analytical Program**

Groundwater samples were also submitted to Lancaster for chemical analyses for constituents listed in Table 830.1 "Required Testing for Petroleum Releases" in the MTCA cleanup Regulation (Ch. 173-340 WAC) including TPH-g, diesel range organics, heavy range organics, and BTEX. Groundwater sample MW2 was also submitted for EDB, EDC, MTBE, naphthalene, HVOCs, EPH, VPH, PCBs, PAHs and total lead.

### **Waste Management**

All soil cuttings, decon water and well development water generated during the drilling activities were stored in Department of Transportation (DOT)-approved, steel, 55-gallon drums. All drums were labeled and placed behind the store building at the northeast corner pending receipt of the sample analytical results. Based on analytical results, the soil and water were profiled and transported by a licensed waste hauler for disposal at the Greater Wenatchee Landfill in Wenatchee, Washington. The soil and water disposal documents are included in Attachment C.

## **ANALYTICAL TEST RESULTS**

The following summarizes the soil analytical laboratory test results:

- Toluene was detected above the laboratory method reporting limit (MRL) in soil samples MW-1@10' and MW-3@10' but the concentration did not exceed the MTCA Method A cleanup levels.
- Total xylenes and tetrachloroethene were detected above the laboratory MRLs in soil sample MW-3@10' but concentrations did not exceed the MTCA Method A cleanup level.
- Total lead was detected above the laboratory MRL in soil samples MW-2@10 and MW-7@10' but the concentration did not exceed the MTCA Method A cleanup level.
- The halogenated volatile organic compound, tetrachloroethene, was detected at the laboratory MRL in soil sample MW-2@10 but the concentration did not exceed the MTCA Method A cleanup level.

The following summarizes the groundwater analytical laboratory test results:

- Diesel and heavy oil range organics were detected above the laboratory MRLs in groundwater sample MW5 but concentrations did not exceed the MTCA Method A cleanup level.
- The analyte EDB was not included in the "Volatiles by 8260 Full Scan" list in the laboratory analytical report.

Laboratory results are summarized on Table 1 through Table 3. Results are also shown on Figure 3 and Figure 4. Analytical laboratory reports and chain-of-custody documentation are included as Attachment B.

### FLOW DIRECTION AND GRADIENT

At the time of the groundwater sampling, the groundwater flow direction was approximately to the southwest. Groundwater elevations ranged from 96.26 feet (MW-5) to 98.36 feet (MW-8). The groundwater gradient was approximately 0.015 feet/feet. The flow direction is shown on Figure 2 and Figure 4.

### CONCLUSIONS

SECOR completed a subsurface investigation from August 8<sup>th</sup> to August 10<sup>th</sup>, 2006 to further characterize soils and groundwater near the areas where soil impacts had been previously identified in October 1995 and January 2005 and to evaluate soil and groundwater quality at the northeast, southeast and southwest corners of the site.

Monitoring wells MW-1 and MW-6 were installed north and west outside of the station building. Soil borings could not be drilled inside the building because the three service bays with hoists were removed and a convenience store was constructed in their place. Monitoring wells MW-2 and MW-3 were installed east of the convenience store building in or near the boundaries of the October 1995 excavation. Monitoring well MW-4 was installed in the planter located at the southeast corner of the site. Monitoring well MW-5 was installed in the planter located at the

Mr. Michael Noll  
January 24, 2007  
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southwest corner of the site. Monitoring well MW-7 was installed on the east side of the north end of the westernmost fuel dispenser in the area where soil sample, FI1-1-3.5, was collected in October 1995. Monitoring well MW-8 was installed near the northeast corner of the site.

Based on analytical results, toluene, total xylenes and lead impacts at levels below the MTCA Method A cleanup levels were located in soil associated with the borings advanced to install monitoring wells MW-1, MW-2, MW-3 and MW-7. Diesel and heavy oil range impacts below the MTCA Method A cleanup levels were detected in groundwater from monitoring well MW-5.

Thus results indicate no concentrations of regulated contaminants above the MTCA Method A cleanup levels in soil and groundwater samples collected from the areas investigated. The site is on Native American land and is under the jurisdiction of the EPA. Based on preliminary discussions with Mr. Michael Shepherd, an equivalent of a 'no further action' letter is obtainable after four quarters of groundwater results below detection limits have been reported.

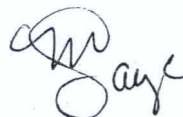
Soil impacts identified about a year ago remain beneath a hydraulic hoist removed from the former service bay area. These soils were never removed because of access issues due to a convenience store occupying the former service bay area. According to Mr. Shepherd, as long as groundwater was not impacted, this should not be an issue.

SECOR appreciates the opportunity to provide environmental consulting services to ConocoPhillips Company. If you have any questions regarding this investigation or wish to discuss the project in general, please contact the undersigned.

Sincerely,  
**SECOR International Incorporated**



Katlin Hanson  
Project Geologist



Marc Sauze  
Senior Project Manager

cc: Mr. Michael Shepherd, Indian Lands Coordinator/LUST Project Manager, EPA Seattle Regional Office

Toxics Cleanup Program, Washington State Department of Ecology, Northwest Regional Office

## **LIST OF FIGURES**

- Figure 1 – Site Location Map
- Figure 2 – Site Plan with New Well Locations and Elevations
- Figure 3 – Site Plan with Soil Analytical Results (8/8-10/2006)
- Figure 4 – Site Plan with Groundwater Elevations and Analytical Results (8/8-10/2006)

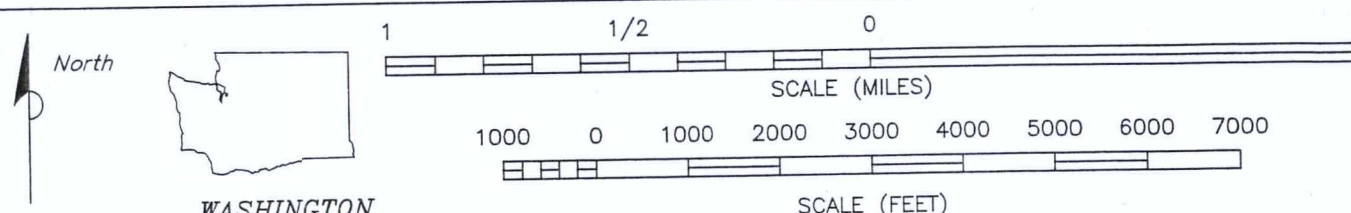
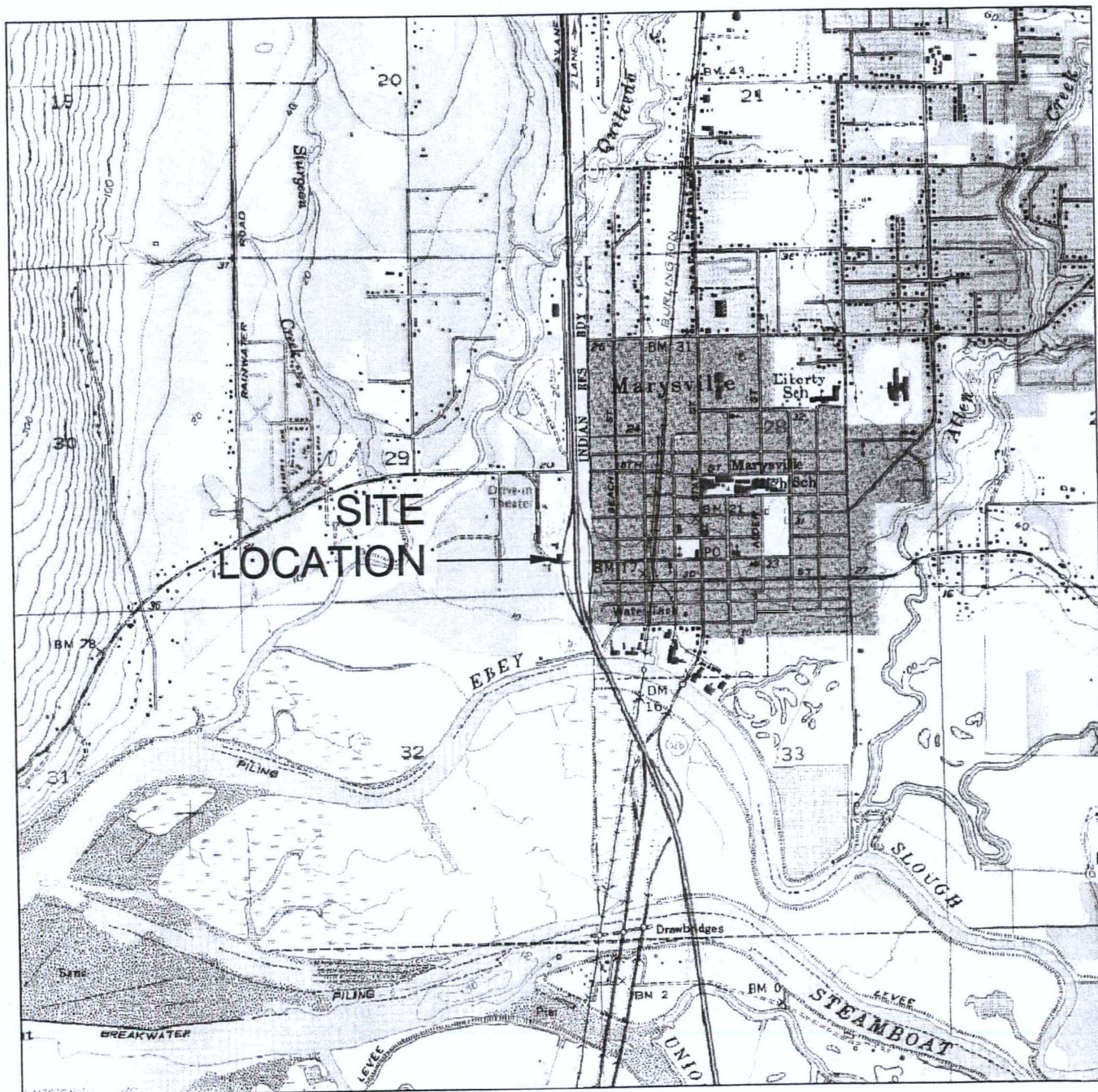
## **LIST OF TABLES**

- Table 1 – Soil Analytical Results
- Table 2 – Groundwater Analytical Results
- Table 3 – Groundwater Analytical Results – PAHs


## **LIST OF ATTACHMENTS**

- |              |   |
|--------------|---|
| ATTACHMENT A | BORING AND WELL CONSTRUCTION LOGS                               |
| ATTACHMENT B | ANALYTICAL LABORATORY REPORT AND CHAIN OF CUSTODY DOCUMENTATION |
| ATTACHMENT C | SOIL AND WATER DISPOSAL DOCUMENTS                               |

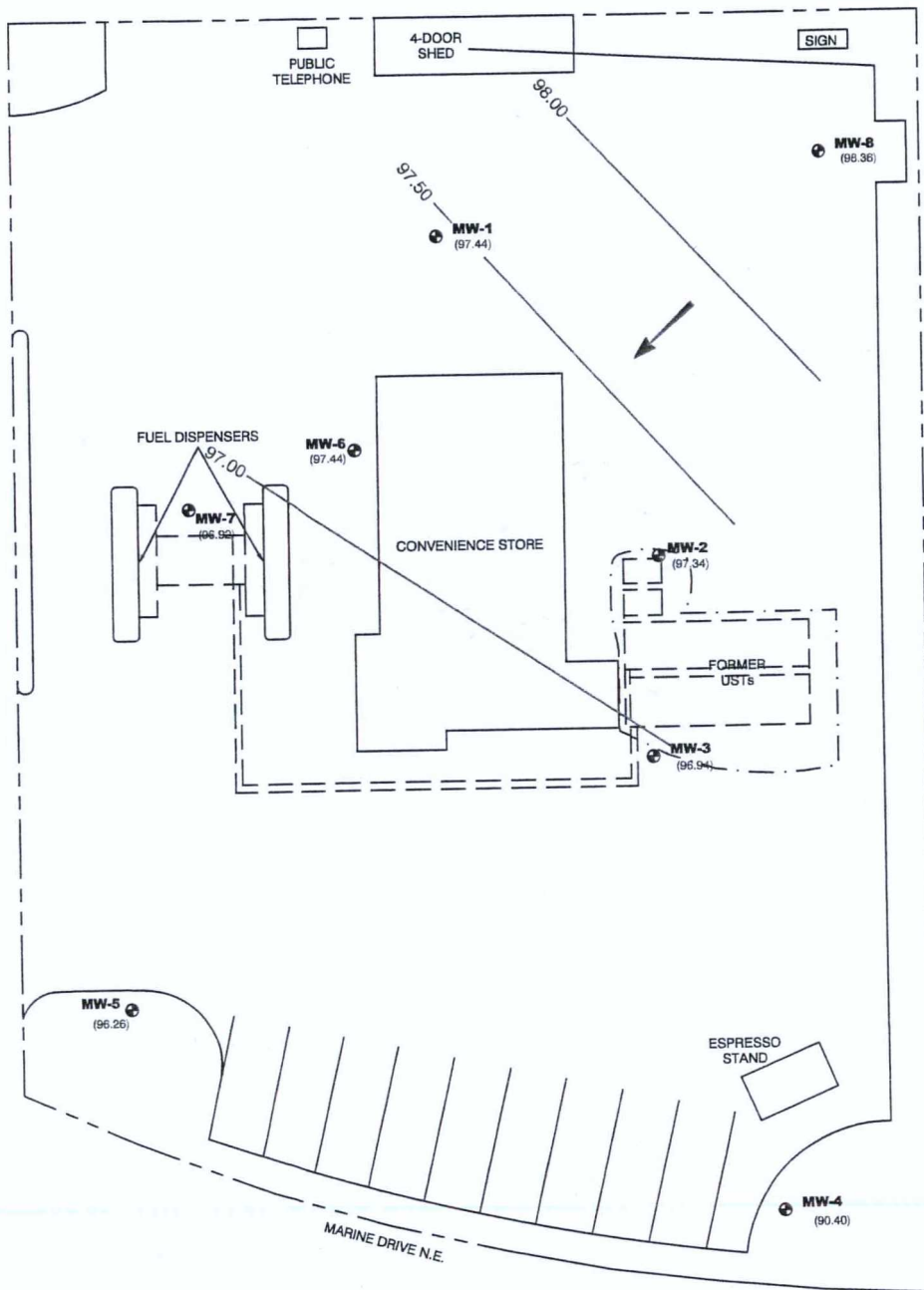
## FIGURES



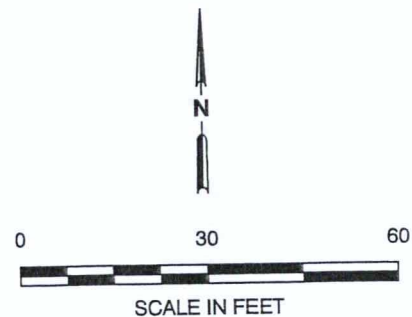
REFERENCE: USGS 7.5 MINUTE QUADRANGLE; MARYSVILLE, WASHINGTON; 1973


 <p><b>SECOR</b></p> <p>12034 134th COURT NORTHEAST, SUITE 102 REDMOND, WASHINGTON 98052 PHONE: (425) 372-1600/(425) 372-1650 FAX</p>	<p>FOR: <b>ConocoPhillips</b></p> <p>FACILITY NO. 256357 3323 MARINE DRIVE MARYSVILLE, WASHINGTON</p> <p>JOB NUMBER: 01CP.02926.00</p> <p>DRAWN BY: CFS</p>	<p><b>SITE LOCATION MAP</b></p> <p>CHECKED BY:</p> <p>APPROVED BY:</p>	<p>FIGURE: <b>1</b></p> <p>DATE: 10/10/06</p>
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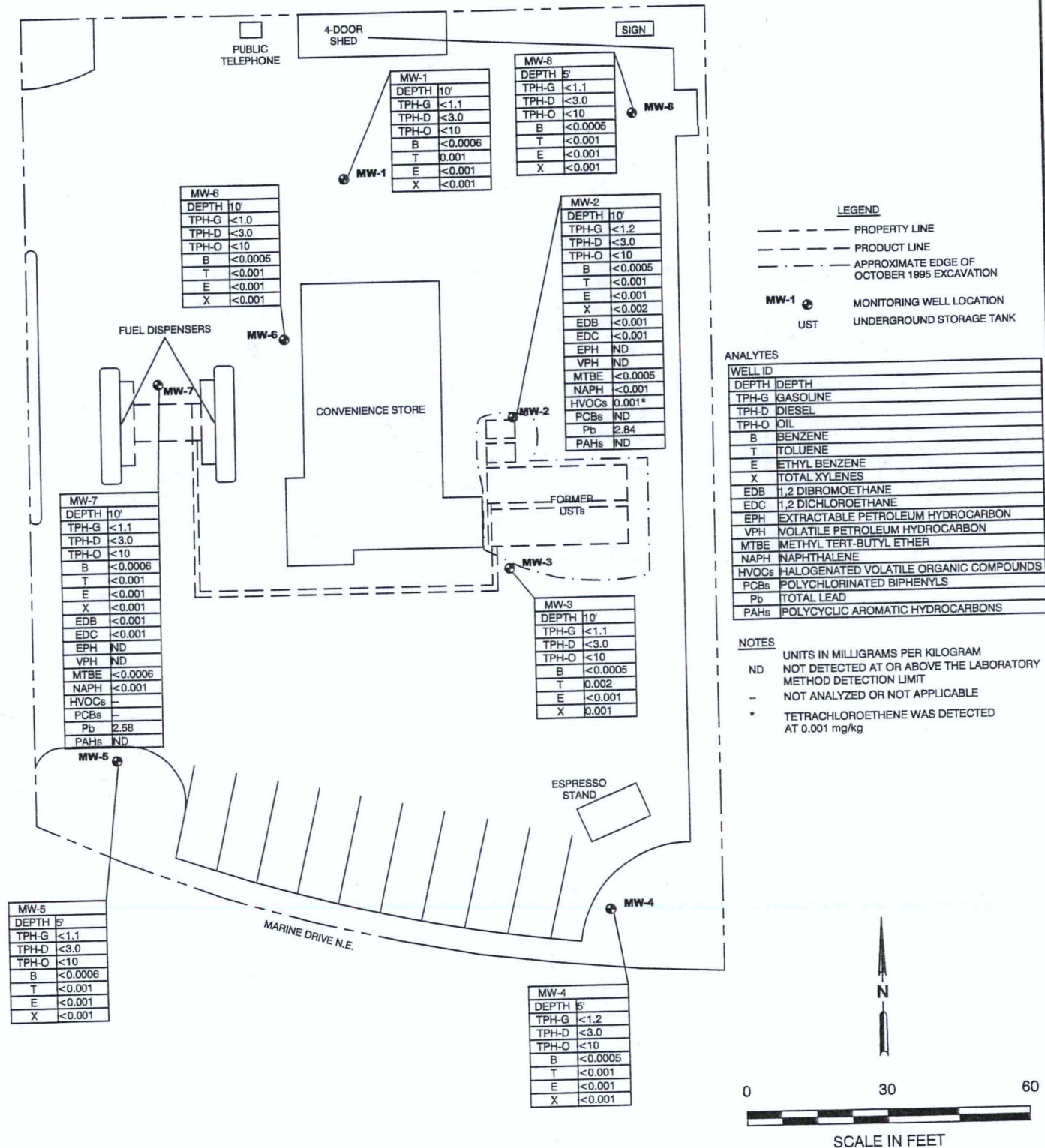
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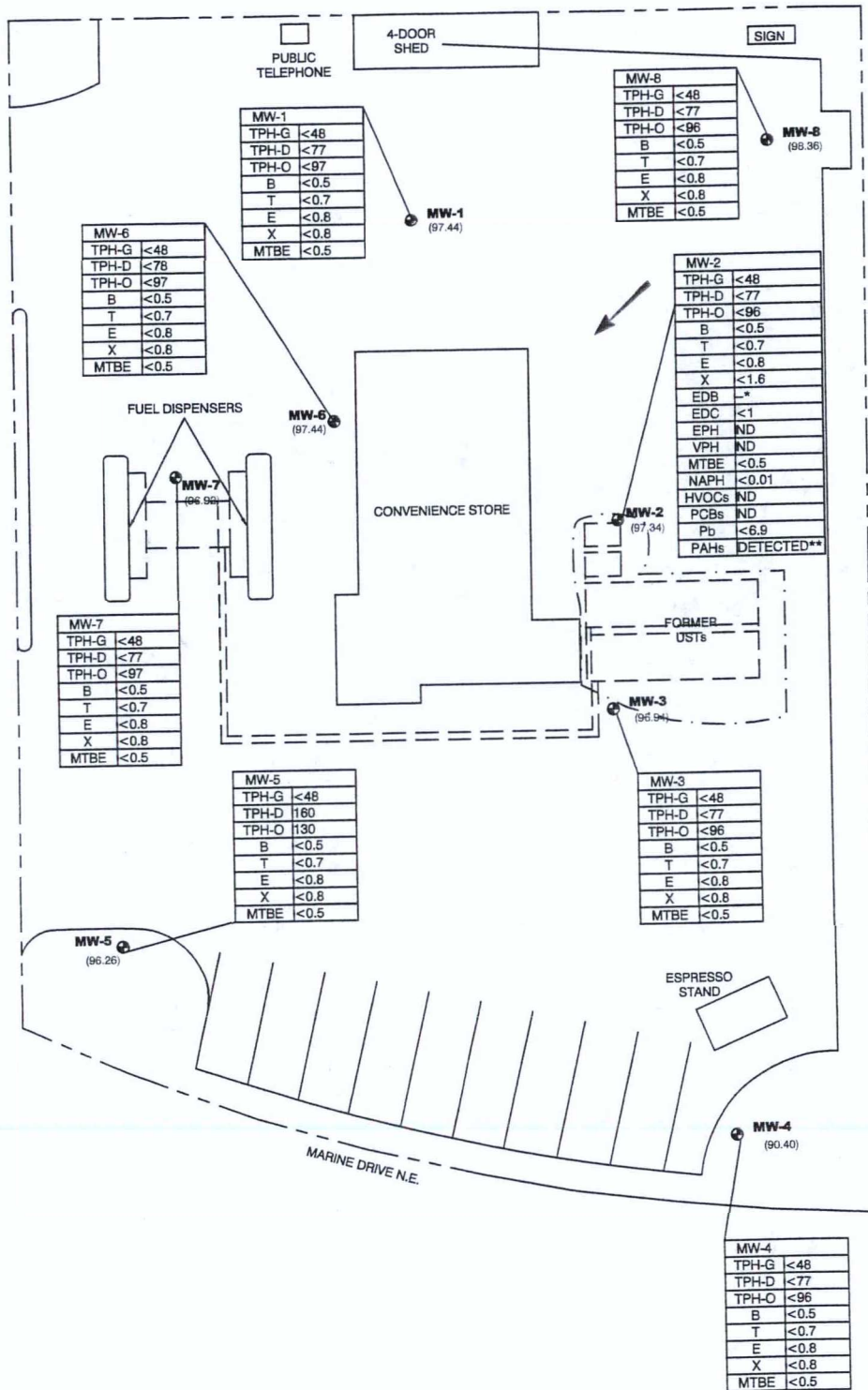
- LEGEND**
- PROPERTY LINE
  - PRODUCT LINE
  - - - APPROXIMATE EDGE OF OCTOBER 1995 EXCAVATION
  - MW-1 ● MONITORING WELL LOCATION
  - UST UNDERGROUND STORAGE TANK
  - (96.36) WELL ELEVATION
  - GROUNDWATER ELEVATION CONTOUR
  - ← GROUNDWATER FLOW DIRECTION



 <b>SECOR</b> 12034 134TH COURT NE, SUITE 102 REDMOND, WASHINGTON PHONE: (425) 372-1600/372-1700 (FAX)	FOR: <b>ConocoPhillips</b> FACILITY NO. 256357 3323 MARINE DRIVE NE MARYSVILLE, WASHINGTON		SITE PLAN WITH NEW WELL LOCATIONS AND ELEVATIONS		FIGURE:  <b>2</b>
	JOB NUMBER: 01CP.02926.00	DRAWN BY: CFS	CHECKED BY: KH	APPROVED BY:	DATE: 01/29/07



 <b>SECOR</b> 12034 134TH COURT NE, SUITE 102 REDMOND, WASHINGTON PHONE: (425) 372-1600/372-1700 (FAX)	FOR: <b>ConocoPhillips</b> FACILITY NO. 256357 3323 MARINE DRIVE NE MARYSVILLE, WASHINGTON		SITE PLAN WITH SOIL ANALYTICAL RESULTS (8/8 - 10/2006)		FIGURE:  <b>3</b>
	JOB NUMBER: 01CP 02926.00	DRAWN BY: CFS	CHECKED BY: KH	APPROVED BY:	DATE: 01/29/07



**LEGEND**

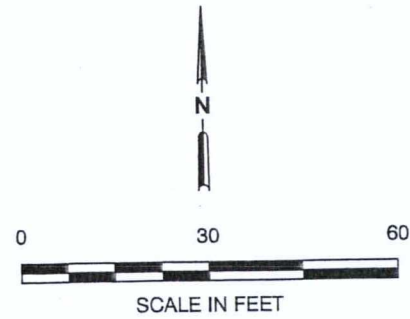
- PROPERTY LINE
- PRODUCT LINE
- - - APPROXIMATE EDGE OF OCTOBER 1995 EXCAVATION
- MW-1 MONITORING WELL LOCATION
- UST UNDERGROUND STORAGE TANK
- (96.36) WELL ELEVATION
- GROUNDWATER FLOW DIRECTION


**ANALYTES**

WELL ID	ANALYTES
TPH-G	GASOLINE
TPH-D	DIESEL
TPH-O	OIL
B	BENZENE
T	TOLUENE
E	ETHYL BENZENE
X	TOTAL XYLENES
EDB	1,2 DIBROMOETHANE
EDC	1,2 DICHLOROETHANE
EPH	EXTRACTABLE PETROLEUM HYDROCARBON
VPH	VOLATILE PETROLEUM HYDROCARBON
MTBE	METHYL TERT-BUTYL ETHER
NAPH	NAPHTHALENE
HVOCs	HALOGENATED VOLATILE ORGANIC COMPOUNDS
PCBs	POLYCHLORINATED BIPHENYLS
Pb	TOTAL LEAD
PAHs	POLYCYCLIC AROMATIC HYDROCARBONS

**NOTES**

- UNITS IN MICROGRAMS PER LITER
- ND NOT DETECTED AT OR ABOVE THE LABORATORY METHOD DETECTION LIMIT
- NOT ANALYZED OR NOT APPLICABLE
- \* 1,2 DICHLOROETHANE NOT ANALYZED
- \*\* SEE TABLE 3



 12034 134TH COURT NE, SUITE 102 REDMOND, WASHINGTON PHONE: (425) 372-1600/372-1700 (FAX)	FOR: <b>ConocoPhillips</b> FACILITY NO. 256357 3323 MARINE DRIVE NE MARYSVILLE, WASHINGTON	<b>SITE PLAN WITH GROUNDWATER ELEVATIONS AND ANALYTICAL RESULTS (8/8 - 10/2006)</b>	FIGURE: <b>4</b> DATE: 01/29/07
JOB NUMBER: 01CP 02926.00	DRAWN BY: CES	CHECKED BY: KH	APPROVED BY:

## TABLES

**TABLE 1**  
**SOIL ANALYTICAL RESULTS**  
 ConocoPhillips Site No. 256357  
 3323 Marine Drive Northeast  
 Marysville, Washington

				Total Petroleum Hydrocarbons			Volatile Organic Compounds														Metals	
Sample Identification	Sample Date	Sample Depth (feet bgs)	PID Field Screen (ppm)	TPH-g (mg/kg)	Diesel-Range (mg/kg)	Heavy-Range (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	EDB (mg/kg)	EDC (mg/kg)	PAHs (mg/kg)	EPH (mg/kg)	VPH (mg/kg)	MTBE (mg/kg)	Naphthalene (mg/kg)	HVOCs	PCBs (mg/kg)	Total Lead (mg/kg)		
MW-1 @ 10'	8/8/06	10	0	<1.1 <sup>a</sup>	<3.0	<10	<0.0006	0.001 <sup>b</sup>	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--		
MW-2 @ 10'	8/9/06	10	0	<1.2 <sup>a</sup>	<3.0	<10	<0.0005	<0.001	<0.001	<0.002	<0.001	<0.001	ND	ND	ND	<0.0005	<0.001	0.001 <sup>c</sup>	ND	2.84		
MW-3 @ 10'	8/9/06	10	0	<1.1 <sup>a</sup>	<3.0	<10	<0.0005	0.002	<0.001	0.001	--	--	--	--	--	--	--	--	--	--		
MW-4 @ 5'	8/8/06	5	0	<1.2 <sup>a</sup>	<3.0	<10	<0.0005	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--		
MW-5 @ 5'	8/8/06	5	0	<1.1 <sup>a</sup>	<3.0	<10	<0.0006	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--		
MW-6 @ 10'	8/9/06	10	0.7	<1.0 <sup>a</sup>	<3.0	<10	<0.0005	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--		
MW-7 @ 10'	8/9/06	10	0	<1.1 <sup>a</sup>	<3.0	<10	<0.0006	<0.001	<0.001	<0.001	<0.001	<0.001	ND	ND	ND	<0.0006	<0.001	--	--	2.58		
MW-8 @ 5'	8/9/06	5	0	<1.1 <sup>a</sup>	<3.0	<10	<0.0005	<0.001	<0.001	<0.001	--	--	--	--	--	--	--	--	--	--		
MTCA Level A Cleanup Levels				30/100 <sup>a</sup>	2,000	2,000	0.03	7	6	9	0.005	--	--	--	--	0.1	5	--	1 <sup>**</sup>	250		

**Notes:**

**BOLD** - Concentration above MTCA Method A Cleanup Level

ND = Less than the stated laboratory method detection limit

-- = Not analyzed, not applicable, or not sampled

All concentrations in milligrams per kilogram (mg/kg).

bgs = below ground surface

Total petroleum hydrocarbons as gasoline (TPH-g) by Northwest Method NWTPH-Gx

Diesel range and heavy range organics by Northwest Method NWTPH-Dx Modified with Silica Gel Acid Cleanup

Benzene, toluene, ethylbenzene, and xylenes by EPA Method SW846/8260B.

EDB = 1,2-dibromoethane; EDC = 1,2-dichloroethane by EPA Method SW846/8260B

PAHs = Polycyclic aromatic hydrocarbons by SW846/8270C SIM

EPH = extractable petroleum hydrocarbons by WA Ecology EPH Method

VPH = volatile petroleum hydrocarbons by WA Ecology VPH Method

MTBE = methyl tert-butyl ether by EPA Method SW846/8260B

Naphthalene by EPA Method SW846/8270C SIM

HVOCs = Halogenated volatile organic compounds by EPA Method SW846/8260B

PCBs = Polychlorinated biphenyls by EPA Method SW846/8082

Total lead by EPA Method SW846/6010B.

MTCA = Model Toxics Control Act (Chapter 173-340 WAC)

\*Gasoline-range hydrocarbon cleanup level is 30 mg/Kg with benzene present in the sample, and 100 mg/Kg with no benzene detected.

\*\* Cleanup level based on applicable federal law (40 CFR 761.61) and a total value for all PCBs

<sup>a</sup> The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were raised.

<sup>b</sup> The value reported for toluene is probably due to carryover from the previous sample. Because only one sample vial was submitted for this analysis, the analysis could not be repeated.

<sup>c</sup> Tetrachloroethene was detected at the method reporting limit (0.001 mg/kg).

**TABLE 2**  
**GROUNDWATER ANALYTICAL RESULTS**  
 ConocoPhillips Site No. 256357  
 3323 Marine Drive Northeast  
 Marysville, Washington

			Total Petroleum Hydrocarbons			Volatile Organic Compounds												Metals
Sample Identification	Sample Date	Depth to Groundwater (feet bgs)	TPH-g (µg/L)	Diesel Range (µg/L)	Heavy Range (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	EDB (µg/L)	EDC (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	HVOCs (µg/L)	EPH (µg/L)	VPH (µg/L)	PCBs (µg/L)	Total Lead (µg/L)
MW1	8/24/06	12.13	<48	<77	<97	<0.5	<0.7	<0.8	<0.8	--	--	<0.5	--	--	--	--	--	--
MW2	8/24/06	12.10	<48	<77	<96	<0.5	<0.7	<0.8	<1.6	-- <sup>a</sup>	<1	<0.5	<0.01	ND	ND	ND	ND	<6.9
MW3	8/24/06	11.77	<48	<77	<96	<0.5	<0.7	<0.8	<0.8	--	--	<0.5	--	--	--	--	--	--
MW4	8/24/06	11.43	<48	<77	<96	<0.5	<0.7	<0.8	<0.8	--	--	<0.5	--	--	--	--	--	--
MW5	8/24/06	11.26	<48	160	130	<0.5	<0.7	<0.8	<0.8	--	--	<0.5	--	--	--	--	--	--
MW6	8/24/06	12.20	<48	<78	<97	<0.5	<0.7	<0.8	<0.8	--	--	<0.5	--	--	--	--	--	--
MW7	8/24/06	11.73	<48	<77	<97	<0.5	<0.7	<0.8	<0.8	--	--	<0.5	--	--	--	--	--	--
MW8	8/24/06	12.95	<48	<77	<96	<0.5	<0.7	<0.8	<0.8	--	--	<0.5	--	--	--	--	--	--
Trip Blank	8/24/06	--	<48	--	--	<0.5	<0.7	<0.8	<0.8	--	--	<0.5	--	--	--	--	--	--
MTCA Level A Cleanup Levels			1,000/800 <sup>*</sup>	500	500	5	1,000	700	1,000	0.01	5	20	160 <sup>**</sup>	--	--	--	0.1 <sup>***</sup>	15

**Notes:**

**BOLD** - Concentration above MTCA Method A Cleanup Level

-- = Not analyzed, not applicable, or not sampled

ND = Not detected

All concentrations in micrograms per liter (µg/L)

MTCA = Model Toxics Control Act (Chapter 173-340 WAC)

bgs = below ground surface

Total petroleum hydrocarbons as gasoline (TPH-g) by ECY 97-602 NWTPH-Gx Modified

Diesel and heavy range organics by Northwest Method NWTPH-Dx Modified with Silica Gel Acid Cleanup (ECY 97-602 NWTPH-Dx Modified)

Benzene, toluene, ethylbenzene, and xylenes by EPA Method SW-846 8021B and 5030B

EDB = 1,2-dibromoethane and EDC = 1,2-dichloroethane by EPA Method 8260 Full Scan

MTBE = methyl tert-butyl ether by EPA Method 8260 Full Scan

Naphthalene by EPA Method 8270 SIM

EPH = Extractable petroleum hydrocarbons by Ecology EPH Method

VPH = Volatile petroleum hydrocarbons by Ecology VPH Method

HVOCs = Halogenated volatile organic compounds by EPA Method 8260

PCB = Polychlorinated biphenyls by SW-846 8082

Total lead by EPA Method SW-846 6010B

\*Gasoline-range hydrocarbon cleanup level is 800 µg/L with benzene present in the sample, and 1000 µg/L with no benzene detected.

\*\* Cleanup level based on concentration derived using Equation 720-1. This is a total value for naphthalene, 1-methyl naphthalene and 2-methyl naphthalene.

\*\*\* Cleanup level based on concentration derived using Equation 720-2, adjusted for the practical quantitation limit. This cleanup level is a total value for all PCBs.

<sup>a</sup> 1,2 Dibromoethane was not in the analyte list under Volatiles by 8260 Full Scan

**TABLE 3**  
**GROUNDWATER ANALYTICAL RESULTS - PAHs**

ConocoPhillips Site No. 256357  
3323 Marine Drive Northeast  
Marysville, Washington

Sample Identification	<b>MW2</b>
Sample Date	08/24/06
Analyte	
Acenaphthylene	<0.02
Acenaphthene <sup>a</sup>	<0.01
Fluorene	<0.01
Phenanthrene	0.041
Anthracene	<0.02
Fluoranthene	0.010
Pyrene	<0.02
Benzo(a)anthracene <sup>b</sup>	<0.02
Chrysene <sup>b</sup>	<0.02
Benzo(b)fluoranthene <sup>b</sup>	<0.02
Benzo(k)fluoranthene <sup>b</sup>	<0.01
Benzo(a)pyrene <sup>b</sup>	<0.02
Indeno(1,2,3-cd)pyrene <sup>b</sup>	<0.02
Dibenz(a,h)anthracene <sup>b</sup>	<0.02
Benzo(g,h,i)perylene <sup>b</sup>	<0.02
1-Methylnaphthalene	0.018
2-Methylnaphthalene	0.017
Naphthalene	<0.01

Notes:

All concentrations in µg/L.

PAHs - polycyclic aromatic hydrocarbons

PAHs by EPA Method 8270-SIM

< = Less than the stated laboratory method reporting limit.

<sup>a</sup> Noncarcinogenic PAHs

<sup>b</sup> Carcinogenic PAHs

Several compounds were detected in the method blank associated with the sample. Sufficient sample was not available to re-extract the sample.

**ATTACHMENT A**  
**BORING AND WELL CONSTRUCTION LOGS**

Subsurface Investigation  
ConocoPhillips Site No. 256357  
3323 Marine Drive Northeast, Marysville, Washington  
SECOR PN No.: 01CP.02926.00  
January 24, 2007

PROJECT: <b>256357 Marysville</b> LOCATION: <b>3323 Marine Drive NE, Marysville, WA</b> PROJECT NUMBER: <b>01CP.02926.00</b>		WELL / PROBEHOLE / BOREHOLE NO: <div style="text-align: center; font-size: 1.2em; font-weight: bold;">MW-1</div> PAGE 1 OF 1		
DRILLING: STARTED <b>8/8/06</b> COMPLETED: <b>8/8/06</b> INSTALLATION: STARTED <b>8/8/06</b> COMPLETED: <b>8/8/06</b> DRILLING COMPANY: <b>Cascade Drilling, Inc.</b> DRILLING EQUIPMENT: <b>CME 75 &amp; 300 lb. hammer</b> DRILLING METHOD: <b>Auger</b> SAMPLING EQUIPMENT: <b>Split Spoon</b>		NORTHING (ft): LATITUDE: GROUND ELEV (ft): INITIAL DTW (ft): <b>12.40 8/8/06</b> STATIC DTW (ft): <b>11.90 8/9/06</b> WELL CASING DIAMETER (in): <b>2</b> LOGGED BY: <b>K. Hanson</b>		EASTING (ft): LONGITUDE: TOC ELEV (ft): <b>97.44</b> BOREHOLE DEPTH (ft): <b>20.0</b> WELL DEPTH (ft): <b>20.0</b> BOREHOLE DIAMETER (in): <b>8</b> CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace P/D (units)	Depth (feet)	Well Construction
			Asphalt							
5		SM	Cleared to 5' below grade with vacuum truck <b>SILTY SAND</b> ; SM; tan; loose; dry to moist; no odor	X	11:15 MW-1@5'	1	5 10 13	0	5	Concrete Hydrated bentonite chips
10		SP	<b>SAND</b> ; SP; tan; loose; dry to moist; no odor	X	11:25 MW-1@10'	1	5 6 10	0	10	
15		SP	<b>SAND</b> ; SP; tan and brown; fine to medium-grained; loose; wet; no odor; no sheen	X	11:30 MW-1@15'	1	10 20 25	0	15	Clean 10-20 sand 0.010 machine slotted screen
20		SP	<b>SAND WITH TRACE SILT</b> ; SP; tan and brown; fine-grained; loose; moist; no odor; mottled; no sheen Hole terminated at 20 feet.	X	11:35 MW-1@20'	1	4 10 25	0	20	Well cap

PROJECT: **256357 Marysville**  
 LOCATION: **3323 Marine Drive NE, Marysville, WA**  
 PROJECT NUMBER: **01CP.02926.00**

WELL / PROBEHOLE / BOREHOLE NO:

**MW-2** PAGE 1 OF 1



DRILLING: STARTED **8/8/06** COMPLETED: **8/9/06**  
 INSTALLATION: STARTED **8/8/06** COMPLETED: **8/9/06**  
 DRILLING COMPANY: **Cascade Drilling, Inc.**  
 DRILLING EQUIPMENT: **CME 75 & 300 lb. hammer**  
 DRILLING METHOD: **Auger**  
 SAMPLING EQUIPMENT: **Split Spoon**

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **12.25 8/8/06**  
 STATIC DTW (ft): **11.89 8/9/06**  
 WELL CASING DIAMETER (in): **2**  
 LOGGED BY: **K. Hanson**  
 EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft): **97.34**  
 BOREHOLE DEPTH (ft): **17.0**  
 WELL DEPTH (ft): **17.0**  
 BOREHOLE DIAMETER (in): **8**  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
			ASPHALT							
			Cleared to 5.5' below grade with vacuum truck							
5				X	12:50 MW-2@5'	1	6 10 11	0	5	Concrete
		SP	SAND ; SP; tan to brown; medium-grained; loose; moist; no odor							Hydrated bentonite chips
10				X	12:55 MW-2@10'	1	6 8 9	0	10	
		SP	SAND ; SP; grayish brown; medium-grained; loose; moist; no odor							Clean 10-20 sand
										0.010 machine slotted screen
15				X	13:00 MW-2@15'	1	10 10 17	0	15	
		SP	SAND ; SP; grayish brown; medium-grained; loose; wet; no odor; tan fine silty sand lense at 15.25', no sheen							Well cap
			Hole terminated at 17 feet.							
20										

PROJECT: **256357 Marysville**  
 LOCATION: **3323 Marine Drive NE, Marysville, WA**  
 PROJECT NUMBER: **01CP.02926.00**

WELL / PROBEHOLE / BOREHOLE NO:

**MW-3** PAGE 1 OF 1



DRILLING: STARTED **8/8/06** COMPLETED: **8/9/06**  
 INSTALLATION: STARTED **8/8/06** COMPLETED: **8/9/06**  
 DRILLING COMPANY: **Cascade Drilling, Inc.**  
 DRILLING EQUIPMENT: **CME 75 & 300 lb. hammer**  
 DRILLING METHOD: **Auger**  
 SAMPLING EQUIPMENT: **Split Spoon**

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **11.90 8/9/06**  
 STATIC DTW (ft): **11.60 8/9/06**  
 WELL CASING DIAMETER (in): **2**  
 LOGGED BY: **K. Hanson**

EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft): **96.94**  
 BOREHOLE DEPTH (ft): **17.0**  
 WELL DEPTH (ft): **17.0**  
 BOREHOLE DIAMETER (in): **8**  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
			ASPHALT							
5		SP	Cleared to 5' below grade with vacuum truck <b>SAND</b> ; SP; brownish gray; medium-grained; loose; moist; no odor	X	14:10 MW-3@5'	1	6 6 13	0	5	Concrete Hydrated bentonite chips
10		SP	<b>SAND</b> ; SP; brownish gray; medium-grained; loose; moist; no odor	X	14:15 MW-3@10'	1	10 10 14	0	10	Clean 10-20 sand 0.010 machine slotted screen
15		SP	<b>SAND</b> ; SP; brownish gray; medium-grained; loose; wet; no odor; trace fine subangular gravel, no sheen	X	14:35 MW-3@15'	1	10 14 25	0	15	Well cap
			Hole terminated at 17 feet.							
20										

PROJECT: <b>256357 Marysville</b> LOCATION: <b>3323 Marine Drive NE, Marysville, WA</b> PROJECT NUMBER: <b>01CP.02926.00</b>		WELL / PROBEHOLE / BOREHOLE NO: <b>MW-4</b> PAGE 1 OF 1 	
DRILLING: STARTED <b>8/8/06</b> COMPLETED: <b>8/8/06</b> INSTALLATION: STARTED <b>8/8/06</b> COMPLETED: <b>8/8/06</b> DRILLING COMPANY: <b>Cascade Drilling, Inc.</b> DRILLING EQUIPMENT: <b>CME 75 &amp; 300 lb. hammer</b> DRILLING METHOD: <b>Auger</b> SAMPLING EQUIPMENT: <b>Split Spoon</b>		NORTHING (ft): LATITUDE: GROUND ELEV (ft): INITIAL DTW (ft): <b>14.00 8/8/06</b> STATIC DTW (ft): <b>11.10 8/9/06</b> WELL CASING DIAMETER (in): <b>2</b> LOGGED BY: <b>K. Hanson</b>	
		EASTING (ft): LONGITUDE: TOC ELEV (ft): <b>96.40</b> BOREHOLE DEPTH (ft): <b>20.0</b> WELL DEPTH (ft): <b>18.0</b> BOREHOLE DIAMETER (in): <b>8</b> CHECKED BY:	

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
			ASPHALT							
			Bark and artificial turf pieces							
			Cleared to 5' below grade with vacuum truck		12:55 MW-4@5'	1	3 4 4	0		
5		SP	SAND ; SP; light tan; medium-grained; loose; moist; no odor						5	
10		SP	SAND ; SP; fine to medium-grained; loose; moist; no odor; mottled		13:00 MW-4@10'	1	6 11 12	0	10	
15		SP	SAND ; SP; brown; medium-grained; loose; moist to wet; no odor; wet @ 14', no sheen		13:10 MW-4@15'	1	15 22 25	0	15	
20		SP	SAND ; SP; tan; fine-grained; loose; wet; no odor; trace rounded fine gravel, no sheen		13:20 MW-4@20'	1	4 6 8	0	20	
			Hole terminated at 20 feet.							

Concrete

Hydrated bentonite chips

Clean 10-20 sand

0.010 machine slotted screen

Well cap

SE0 FORM 304 256357-CP-AUG-2006.GPJ SECOR INTL.GDT 1/26/07

PROJECT: <b>256357 Marysville</b> LOCATION: <b>3323 Marine Drive NE, Marysville, WA</b> PROJECT NUMBER: <b>01CP.02926.00</b>		WELL / PROBEHOLE / BOREHOLE NO: <b>MW-5</b> PAGE 1 OF 1 <div style="text-align: right;"> </div>	
DRILLING: STARTED <b>8/8/06</b> COMPLETED: <b>8/8/06</b> INSTALLATION: STARTED <b>8/8/06</b> COMPLETED: <b>8/8/06</b> DRILLING COMPANY: <b>Cascade Drilling, Inc.</b> DRILLING EQUIPMENT: <b>CME 75 &amp; 300 lb. hammer</b> DRILLING METHOD: <b>Auger</b> SAMPLING EQUIPMENT: <b>Split Spoon</b>		NORTHING (ft): LATITUDE: GROUND ELEV (ft): INITIAL DTW (ft): <b>11.40 8/8/06</b> STATIC DTW (ft): <b>11.05 8/9/06</b> WELL CASING DIAMETER (in): <b>2</b> LOGGED BY: <b>K. Hanson</b>	
		EASTING (ft): LONGITUDE: TOC ELEV (ft): <b>96.26</b> BOREHOLE DEPTH (ft): <b>18.0</b> WELL DEPTH (ft): <b>18.0</b> BOREHOLE DIAMETER (in): <b>8</b> CHECKED BY:	

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace P/D (units)	Depth (feet)	Well Construction
			ASPHALT							<p>Concrete</p> <p>Hydrated bentonite chips</p> <p>Clean 10-20 sand</p> <p>0.010 machine slotted screen</p> <p>Well cap</p>
5		SP	Cleared to 5' below grade with vacuum truck <b>SAND</b> ; SP; reddish brown to tan; fine to medium-grained; loose; moist; no odor	X	14:25 MW-5@5'	1	8 8 11	0	5	
10		SP	<b>SAND</b> ; SP; grayish brown; medium-grained; loose; moist to wet; no odor; no sheen	X	14:30 MW-5@10'	1	11 9 29	0	10	
15		SP	<b>SAND</b> ; SP; grayish brown; medium-grained; loose; wet; no odor; trace fine subangular gravel; no sheen	X	14:55 MW-5@15'	1	15 17 30	0	15	
20			Hole terminated at 18 feet.						20	

PROJECT: **256357 Marysville**  
 LOCATION: **3323 Marine Drive NE, Marysville, WA**  
 PROJECT NUMBER: **01CP.02926.00**

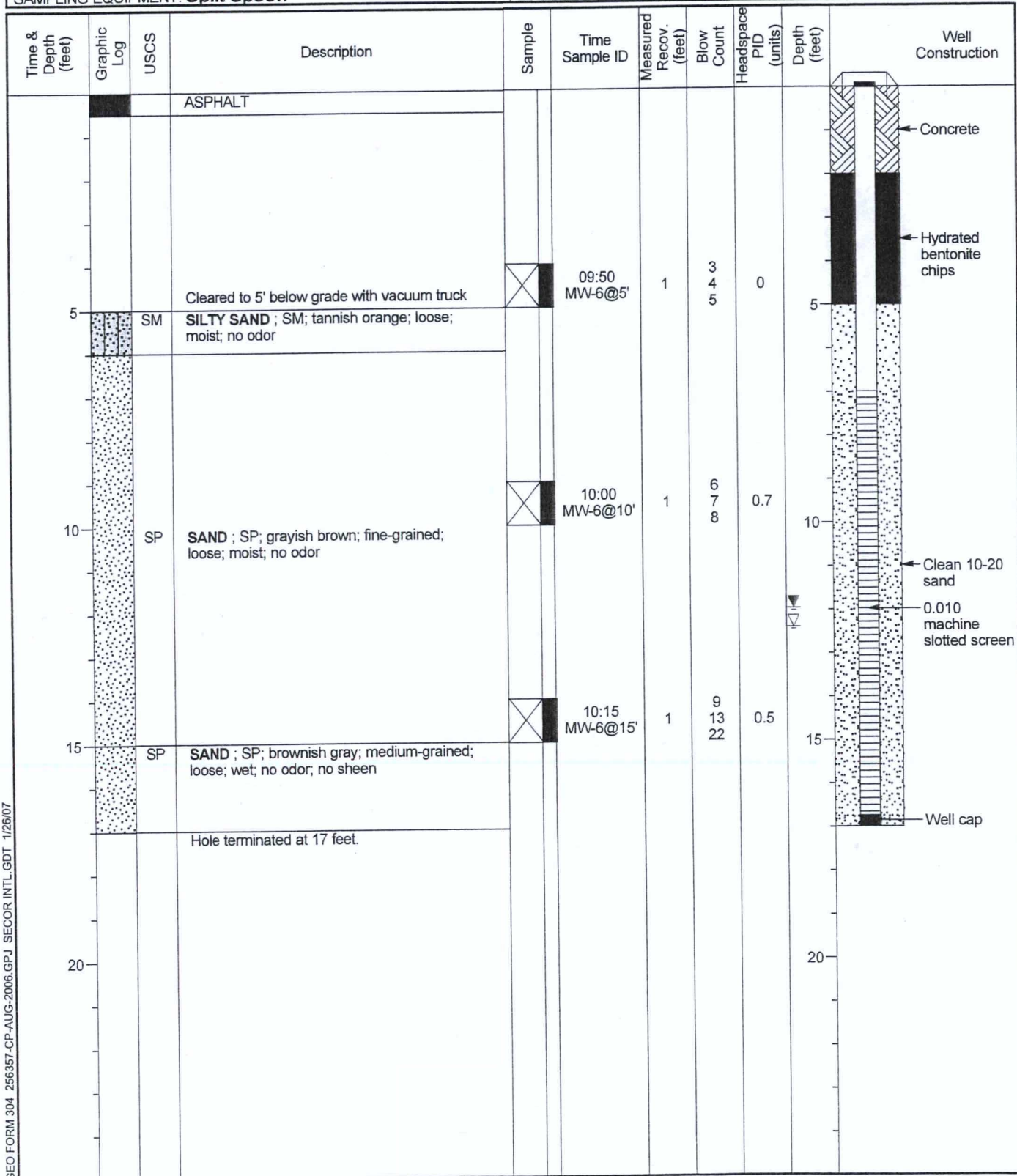
WELL / PROBEHOLE / BOREHOLE NO:

**MW-6** PAGE 1 OF 1



DRILLING: STARTED **8/8/06** COMPLETED: **8/9/06**  
 INSTALLATION: STARTED **8/8/06** COMPLETED: **8/9/06**  
 DRILLING COMPANY: **Cascade Drilling, Inc.**  
 DRILLING EQUIPMENT: **CME 75 & 300 lb. hammer**  
 DRILLING METHOD: **Auger**  
 SAMPLING EQUIPMENT: **Split Spoon**

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **12.40 8/9/06**  
 STATIC DTW (ft): **11.97 8/9/09**  
 WELL CASING DIAMETER (in): **2**  
 LOGGED BY: **K. Hanson**  
 EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft): **97.44**  
 BOREHOLE DEPTH (ft): **17.0**  
 WELL DEPTH (ft): **17.0**  
 BOREHOLE DIAMETER (in): **8**  
 CHECKED BY:



PROJECT: **256357 Marysville**  
 LOCATION: **3323 Marine Drive NE, Marysville, WA**  
 PROJECT NUMBER: **01CP.02926.00**

WELL / PROBEHOLE / BOREHOLE NO:

**MW-7** PAGE 1 OF 1



DRILLING: STARTED **8/8/06** COMPLETED: **8/9/06**  
 INSTALLATION: STARTED **8/8/06** COMPLETED: **8/9/06**  
 DRILLING COMPANY: **Cascade Drilling, Inc.**  
 DRILLING EQUIPMENT: **CME 75 & 300 lb. hammer**  
 DRILLING METHOD: **Auger**  
 SAMPLING EQUIPMENT: **Split Spoon**

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **11.90 8/9/06**  
 STATIC DTW (ft): **11.50 8/9/06**  
 WELL CASING DIAMETER (in): **2**  
 LOGGED BY: **K. Hanson**  
 EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft): **96.92**  
 BOREHOLE DEPTH (ft): **18.0**  
 WELL DEPTH (ft): **18.0**  
 BOREHOLE DIAMETER (in): **8**  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
										Concrete
5		SP	Cleared to 5' below grade with vacuum truck <b>SAND</b> ; SP; brown; medium-grained; loose; moist; no odor	X	08:25 MW-7@5'	1	7 11 13	0	5	Hydrated bentonite chips
10		SP	<b>SAND</b> ; SP; light brown; fine-grained; loose; moist; no odor	X	08:30 MW-7@10'	1	7 8 8	0	10	Clean 10-20 sand
15		SP	<b>SAND</b> ; SP; light brown; fine-grained; loose; wet; no odor; mottled; no sheen	X	08:50 MW-7@15'	1	11 25 33	0	15	0.010 machine slotted screen
20			Hole terminated at 18 feet.							Well cap

PROJECT: **256357 Marysville**  
 LOCATION: **3323 Marine Drive NE, Marysville, WA**  
 PROJECT NUMBER: **01CP.02926.00**

WELL / PROBEHOLE / BOREHOLE NO:

**MW-8** PAGE 1 OF 1



DRILLING: STARTED **8/9/06** COMPLETED: **8/9/06**  
 INSTALLATION: STARTED **8/9/06** COMPLETED: **8/9/06**  
 DRILLING COMPANY: **Cascade Drilling, Inc.**  
 DRILLING EQUIPMENT: **CME 75 & 300 lb. hammer**  
 DRILLING METHOD: **Auger**  
 SAMPLING EQUIPMENT: **Split Spoon**

NORTHING (ft):  
 LATITUDE:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **12.85 8/9/06**  
 STATIC DTW (ft): **12.70 8/9/06**  
 WELL CASING DIAMETER (in): **2**  
 LOGGED BY: **K. Hanson**

EASTING (ft):  
 LONGITUDE:  
 TOC ELEV (ft): **98.36**  
 BOREHOLE DEPTH (ft): **18.0**  
 WELL DEPTH (ft): **18.0**  
 BOREHOLE DIAMETER (in): **8**  
 CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Well Construction
			ASPHALT							
5		SM	Cleared to 5' below grade with vacuum truck <b>SILTY SAND ; SM; tannish orange; loose; moist; no odor; organics at 6'</b>		11:05 MW-8@5'	1	3 6 8	0	5	Concrete Hydrated bentonite chips
10		SP	<b>SAND ; SP; brownish gray; medium-grained; loose; moist; no odor</b>		11:10 MW-8@10'	1	8 12 20	0	10	
15		SP	<b>SAND ; SP; brownish tan; fine to medium-grained; loose; wet; no odor; no sheen</b>		11:25 MW-8@15'	1	6 6 16	0	15	Clean 10-20 sand 0.010 machine slotted screen
20			Hole terminated at 18 feet.							Well cap

**ATTACHMENT B**  
**ANALYTICAL LABORATORY REPORT AND CHAIN-OF-CUSTODY**  
**DOCUMENTATION**

Subsurface Investigation  
ConocoPhillips Site No. 256357  
3323 Marine Drive Northeast, Marysville, Washington  
SECOR PN No.: 01CP.02926.00  
January 24, 2007



## Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • [www.lancasterlabs.com](http://www.lancasterlabs.com)

### ANALYTICAL RESULTS

Prepared for:

ConocoPhillips  
1230 West Washington Street  
Suite 212  
Tempe AZ 85281

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

### SAMPLE GROUP

The sample group for this submittal is 1001320. Samples arrived at the laboratory on Friday, August 11, 2006. The PO# for this group is 4506609197 and the release number is TROTTER.

#### Client Description

MW-1@10' Grab Soil Sample  
MW-2@10' Grab Soil Sample  
MW-3@10' Grab Soil Sample  
MW-4@5' Grab Soil Sample  
MW-5@5' Grab Soil Sample  
MW-6@10' Grab Soil Sample  
MW-7@10' Grab Soil Sample  
MW-8@5' Grab Soil Sample

#### Lancaster Labs Number

4839834  
4839835  
4839836  
4839837  
4839838  
4839839  
4839840  
4839841

ELECTRONIC    SECOR International  
COPY TO

Attn: Marc Sauze

Questions? Contact your Client Services Representative  
Megan A Moeller at (717) 656-2300

Respectfully Submitted,



Valerie L. Tomayko  
Group Leader



# Analysis Report

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Page 1 of 2

Lancaster Laboratories Sample No. SW 4839834

MW-1@10' Grab Soil Sample  
Site# 256357 Proj# 01CP.02926.00  
3323 Marine Drive NE - Marysville, WA  
Collected: 08/08/2006 11:25 by KH

Account Number: 11817

Submitted: 08/11/2006 09:45  
Reported: 08/28/2006 at 11:19  
Discard: 09/28/2006

ConocoPhillips  
1230 West Washington Street  
Suite 212  
Tempe AZ 85281

MDM01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00111	Moisture	n.a.	3.4	0.50	%	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					
02005	TPH by NWTPH-Gx soils					
01659	TPH by NWTPH-Gx soils	n.a.	N.D.	1.1	mg/kg	27.53
	The analysis for volatiles was performed on a sample which was preserved in methanol. Therefore, the reporting limits were raised.					
02214	TPH by NWTPH-Dx(soils) w/SiGel					
02097	Diesel Range Organics	n.a.	N.D.	3.0	mg/kg	1
02098	Heavy Range Organics	n.a.	N.D.	10.	mg/kg	1
02304	UST-Unleaded Soils by 8260B					
05460	Benzene	71-43-2	N.D.	0.0006	mg/kg	1.13
05466	Toluene	108-88-3	0.001	0.001	mg/kg	1.13
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	1.13
06301	Xylene (Total)	1330-20-7	N.D.	0.001	mg/kg	1.13
	The value reported for toluene is probably due to carryover from the previous sample. Because only one sample vial was submitted for this analysis, the analysis could not be repeated.					

State of Washington Lab Certification No. C259

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	08/15/2006 20:15	Scott W Freisher	1
02005	TPH by NWTPH-Gx soils	ECY 97-602 NWTPH-Gx modified	1	08/16/2006 20:53	Linda C Pape	27.53
02214	TPH by NWTPH-Dx(soils) w/SiGel	ECY 97-602 NWTPH-Dx modified	1	08/15/2006 05:32	Matthew E Barton	1



# Analysis Report

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Lancaster Laboratories Sample No. SW 4839834

MW-1@10' Grab Soil Sample  
Site# 256357 Proj# 01CP.02926.00  
3323 Marine Drive NE - Marysville, WA  
Collected: 08/08/2006 11:25 by KH

Account Number: 11817

ConocoPhillips  
1230 West Washington Street  
Suite 212  
Tempe AZ 85281

Submitted: 08/11/2006 09:45  
Reported: 08/28/2006 at 11:19  
Discard: 09/28/2006

MDM01							
02304	UST-Unleaded Soils by	SW-846 8260B	1	08/21/2006 08:23	Stephanie A Selis	1.13	
	8260B						
02392	GC/MS - Field Preserved	SW-846 5035	1	08/15/2006 09:02	Stephanie A Sanchez	1	
	NaHSO4						
06647	GC Field Preserved MeOH	SW-846 5035	1	08/15/2006 09:50	Stephanie A Sanchez	n.a.	
07024	DRO Alternate Soil	ECY 97-602 NWTPH-Dx	1	08/14/2006 07:20	Ineabelle Poveda	1	
	Extraction	06/97					
07579	GC/MS-Field PreservedMeOH-	SW-846 5035	1	08/12/2006 18:00	Justin M Bowers	1	
	NC						



# Analysis Report

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Lancaster Laboratories Sample No. SW 4839835

MW-2@10' Grab Soil Sample  
Site# 256357 Proj# 01CP.02926.00  
3323 Marine Drive NE - Marysville, WA  
Collected: 08/09/2006 12:55 by KH

Account Number: 11817

ConocoPhillips  
1230 West Washington Street  
Suite 212  
Tempe AZ 85281

Submitted: 08/11/2006 09:45  
Reported: 08/28/2006 at 11:19  
Discard: 09/28/2006

MDM02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
06955	Lead	7439-92-1	2.84	0.428	mg/kg	1
00111	Moisture	n.a.	4.1	0.50	%	1
"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						
02005	TPH by NWTPH-Gx soils					
01659	TPH by NWTPH-Gx soils	n.a.	N.D.	1.2	mg/kg	29.14
The analysis for volatiles was performed on a sample which was preserved in methanol. Therefore, the reporting limits were raised.						
02214	TPH by NWTPH-Dx(soils) w/SiGel					
02097	Diesel Range Organics	n.a.	N.D.	3.0	mg/kg	1
02098	Heavy Range Organics	n.a.	N.D.	10.	mg/kg	1
05666	WA- VPH soils					
05726	Methyl t-butyl ether	1634-04-4	N.D.	0.0500	mg/kg	50
05738	Benzene	71-43-2	N.D.	0.0500	mg/kg	50
05739	Toluene	108-88-3	N.D.	0.0500	mg/kg	50
05740	Ethylbenzene	100-41-4	N.D.	0.0500	mg/kg	50
05741	m,p-Xylenes	1330-20-7	N.D.	0.100	mg/kg	50
05777	o-Xylene	95-47-6	N.D.	0.0500	mg/kg	50
05779	C5-C6 Aliphatic Hydrocarbons	n.a.	N.D.	2.50	mg/kg	50
05786	C6-C8 Aliphatic Hydrocarbons	n.a.	N.D.	2.50	mg/kg	50
05793	C8-C10 Aliphatic Hydrocarbons	n.a.	N.D.	2.50	mg/kg	50
05794	C8-C10 Aromatic Hydrocarbons	n.a.	N.D.	2.50	mg/kg	50
05970	WA EPH in Soil					
05971	>C10 - C12 Aliphatic	n.a.	N.D.	1.0	mg/kg	1
05972	>C12 - C16 Aliphatic	n.a.	N.D.	1.0	mg/kg	1
05973	>C16 - C21 Aliphatic	n.a.	N.D.	3.0	mg/kg	1
05974	>C21 - C34 Aliphatic	n.a.	N.D.	1.0	mg/kg	1
05975	>C10 - C12 Aromatic	n.a.	N.D.	1.0	mg/kg	1
05976	>C12 - C16 Aromatic	n.a.	N.D.	1.0	mg/kg	1
05977	>C16 - C21 Aromatic	n.a.	N.D.	2.0	mg/kg	1
05978	>C21 - C34 Aromatic	n.a.	N.D.	2.0	mg/kg	1

01216 PCBs in Solids

Lancaster Laboratories Sample No. SW 4839835

MW-2@10' Grab Soil Sample  
Site# 256357 Proj# 01CP.02926.00  
3323 Marine Drive NE - Marysville, WA  
Collected: 08/09/2006 12:55 by KH

Account Number: 11817

Submitted: 08/11/2006 09:45  
Reported: 08/28/2006 at 11:19  
Discard: 09/28/2006

ConocoPhillips  
1230 West Washington Street  
Suite 212  
Tempe AZ 85281

MDM02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01495	PCB-1016	12674-11-2	N.D.	0.0033	mg/kg	1
01496	PCB-1221	11104-28-2	N.D.	0.0052	mg/kg	1
01497	PCB-1232	11141-16-5	N.D.	0.0033	mg/kg	1
01498	PCB-1242	53469-21-9	N.D.	0.0033	mg/kg	1
01499	PCB-1248	12672-29-6	N.D.	0.0033	mg/kg	1
01500	PCB-1254	11097-69-1	N.D.	0.0033	mg/kg	1
01501	PCB-1260	11096-82-5	N.D.	0.0033	mg/kg	1
02858	Selected SVOA's in soil by SIM					
02863	Naphthalene	91-20-3	N.D.	0.001	mg/kg	1
02864	2-Methylnaphthalene	91-57-6	N.D.	0.0007	mg/kg	1
02865	1-Methylnaphthalene	90-12-0	N.D.	0.002	mg/kg	1
02867	Acenaphthylene	208-96-8	N.D.	0.0003	mg/kg	1
02868	Acenaphthene	83-32-9	N.D.	0.0007	mg/kg	1
02870	Fluorene	86-73-7	N.D.	0.0007	mg/kg	1
02871	Phenanthrene	85-01-8	N.D.	0.0007	mg/kg	1
02872	Anthracene	120-12-7	N.D.	0.0003	mg/kg	1
02874	Fluoranthene	206-44-0	N.D.	0.0007	mg/kg	1
02875	Pyrene	129-00-0	N.D.	0.0007	mg/kg	1
02876	Benzo(a)anthracene	56-55-3	N.D.	0.0007	mg/kg	1
02877	Chrysene	218-01-9	N.D.	0.0003	mg/kg	1
02878	Benzo(b)fluoranthene	205-99-2	N.D.	0.001	mg/kg	1
02879	Benzo(k)fluoranthene	207-08-9	N.D.	0.001	mg/kg	1
02880	Benzo(a)pyrene	50-32-8	N.D.	0.0007	mg/kg	1
02881	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.001	mg/kg	1
02882	Dibenz(a,h)anthracene	53-70-3	N.D.	0.001	mg/kg	1
02883	Benzo(g,h,i)perylene	191-24-2	N.D.	0.001	mg/kg	1
03983	EPA SW 846/8260 - Soil					
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	mg/kg	0.96
06297	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.001	mg/kg	0.96
06298	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.001	mg/kg	0.96
08199	Freon 113	76-13-1	N.D.	0.002	mg/kg	0.96
05441	EPA SW846/8260 (soil)					
05444	Chloromethane	74-87-3	N.D.	0.002	mg/kg	0.96
05445	Vinyl Chloride	75-01-4	N.D.	0.001	mg/kg	0.96
05446	Bromomethane	74-83-9	N.D.	0.002	mg/kg	0.96



# Analysis Report

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Lancaster Laboratories Sample No. SW 4839835

MW-2@10' Grab Soil Sample  
Site# 256357 Proj# 01CP.02926.00  
3323 Marine Drive NE - Marysville, WA  
Collected: 08/09/2006 12:55 by KH

Account Number: 11817

Submitted: 08/11/2006 09:45  
Reported: 08/28/2006 at 11:19  
Discard: 09/28/2006

ConocoPhillips  
1230 West Washington Street  
Suite 212  
Tempe AZ 85281

MDM02

CAT No.	Analysis Name	CAS Number	As Received	As Received	Units	Dilution Factor
			Result	Method Detection Limit		
05447	Chloroethane	75-00-3	N.D.	0.002	mg/kg	0.96
05448	Trichlorofluoromethane	75-69-4	N.D.	0.002	mg/kg	0.96
05449	1,1-Dichloroethene	75-35-4	N.D.	0.001	mg/kg	0.96
05450	Methylene Chloride	75-09-2	N.D.	0.002	mg/kg	0.96
05451	trans-1,2-Dichloroethene	156-60-5	N.D.	0.001	mg/kg	0.96
05452	1,1-Dichloroethane	75-34-3	N.D.	0.001	mg/kg	0.96
05454	cis-1,2-Dichloroethene	156-59-2	N.D.	0.001	mg/kg	0.96
05455	Chloroform	67-66-3	N.D.	0.001	mg/kg	0.96
05457	1,1,1-Trichloroethane	71-55-6	N.D.	0.001	mg/kg	0.96
05458	Carbon Tetrachloride	56-23-5	N.D.	0.001	mg/kg	0.96
05460	Benzene	71-43-2	N.D.	0.0005	mg/kg	0.96
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	mg/kg	0.96
05462	Trichloroethene	79-01-6	N.D.	0.001	mg/kg	0.96
05463	1,2-Dichloropropane	78-87-5	N.D.	0.001	mg/kg	0.96
05465	Bromodichloromethane	75-27-4	N.D.	0.001	mg/kg	0.96
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	0.96
05467	1,1,2-Trichloroethane	79-00-5	N.D.	0.001	mg/kg	0.96
05468	Tetrachloroethene	127-18-4	0.001	0.001	mg/kg	0.96
05470	Dibromochloromethane	124-48-1	N.D.	0.001	mg/kg	0.96
05471	1,2-Dibromoethane	106-93-4	N.D.	0.001	mg/kg	0.96
05472	Chlorobenzene	108-90-7	N.D.	0.001	mg/kg	0.96
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	0.96
05475	m+p-Xylene	1330-20-7	N.D.	0.001	mg/kg	0.96
05476	o-Xylene	95-47-6	N.D.	0.001	mg/kg	0.96
05478	Bromoform	75-25-2	N.D.	0.001	mg/kg	0.96
05480	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.001	mg/kg	0.96
05491	1,3-Dichlorobenzene	541-73-1	N.D.	0.001	mg/kg	0.96
05492	1,4-Dichlorobenzene	106-46-7	N.D.	0.001	mg/kg	0.96
05494	1,2-Dichlorobenzene	95-50-1	N.D.	0.001	mg/kg	0.96

State of Washington Lab Certification No. C259

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis Trial#	Date and Time	Analyst	Dilution Factor
------------	---------------	--------	--------------------	---------------	---------	--------------------

Lancaster Laboratories Sample No. SW 4839835

MW-2@10' Grab Soil Sample  
Site# 256357 Proj# 01CP.02926.00  
3323 Marine Drive NE - Marysville, WA  
Collected: 08/09/2006 12:55 by KH

Account Number: 11817

ConocoPhillips  
1230 West Washington Street  
Suite 212  
Tempe AZ 85281

Submitted: 08/11/2006 09:45  
Reported: 08/28/2006 at 11:19  
Discard: 09/28/2006

MDM02							
06955	Lead	SW-846 6010B	1	08/16/2006 08:54	Eric L Eby	1	
00111	Moisture	EPA 160.3 modified	1	08/15/2006 20:15	Scott W Freisher	1	
02005	TPH by NWTTPH-Gx soils	ECY 97-602 NWTTPH-Gx modified	1	08/16/2006 21:29	Linda C Pape	29.14	
02214	TPH by NWTTPH-Dx(soils) w/SiGel	ECY 97-602 NWTTPH-Dx modified	1	08/15/2006 05:51	Matthew E Barton	1	
05666	WA- VPH soils	ECY 97-602 WA VPH	1	08/22/2006 01:27	K. Robert Caulfeild-James	50	
05970	WA EPH in Soil	ECY 97-602 WA EPH	1	08/19/2006 02:02	Robert Brown	1	
05970	WA EPH in Soil	ECY 97-602 WA EPH	1	08/19/2006 02:50	Robert Brown	1	
01216	PCBs in Solids	SW-846 8082	1	08/21/2006 08:49	Richard A Shober	1	
02858	Selected SVOA's in soil by SIM	SW-846 8270C SIM	1	08/19/2006 06:35	Linda M Hartenstine	1	
03983	EPA SW 846/8260 - Soil	SW-846 8260B	1	08/17/2006 17:05	Kenneth L Boley Jr	0.96	
05441	EPA SW846/8260 (soil)	SW-846 8260B	1	08/17/2006 17:05	Kenneth L Boley Jr	0.96	
00381	BNA Soil Extraction	SW-846 3550B	1	08/15/2006 14:10	Melida Reyes	1	
00497	Silica Gel Fractionation MA HC	SW-846 3630C modified	1	08/17/2006 11:45	Denise L Trimby	1	
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	08/17/2006 00:15	David V Hershey Jr	1	
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035	1	08/15/2006 09:03	Stephanie A Sanchez	1	
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035	2	08/15/2006 09:03	Stephanie A Sanchez	1	
05708	SW SW846 ICP Digest	SW-846 3050B	1	08/15/2006 20:00	Annamaria Stipkovits	1	
06170	GC - Bulk Soil Prep (VPH)	MA DEP VPH modified	1	08/15/2006 15:10	Eric L Vera	n.a.	
06647	GC Field Preserved MeOH	SW-846 5035	1	08/15/2006 08:51	Stephanie A Sanchez	n.a.	
07004	Extraction - DRO (Soils)	ECY 97-602 WA EPH	1	08/15/2006 09:25	Lindsay K Ward	1	
07024	DRO Alternate Soil Extraction	ECY 97-602 NWTTPH-Dx 06/97	1	08/14/2006 07:20	Ineabelle Poveda	1	
07579	GC/MS-Field PreservedMeOH-NC	SW-846 5035	1	08/12/2006 18:01	Justin M Bowers	1	
07579	GC/MS-Field PreservedMeOH-NC	SW-846 5035	2	08/12/2006 18:02	Justin M Bowers	1	
07579	GC/MS-Field PreservedMeOH-NC	SW-846 5035	3	08/12/2006 18:03	Justin M Bowers	1	



# Analysis Report

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Lancaster Laboratories Sample No. SW 4839836

MW-3@10' Grab Soil Sample  
Site# 256357 Proj# 01CP.02926.00  
3323 Marine Drive NE - Marysville, WA  
Collected: 08/09/2006 14:15 by KH

Account Number: 11817

Submitted: 08/11/2006 09:45  
Reported: 08/28/2006 at 11:19  
Discard: 09/28/2006

ConocoPhillips  
1230 West Washington Street  
Suite 212  
Tempe AZ 85281

MDM03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00111	Moisture	n.a.	4.4	0.50	%	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					
02005	TPH by NWTPH-Gx soils					
01659	TPH by NWTPH-Gx soils	n.a.	N.D.	1.1	mg/kg	26.71
	The analysis for volatiles was performed on a sample which was preserved in methanol. Therefore, the reporting limits were raised.					
02214	TPH by NWTPH-Dx(soils) w/SiGel					
02097	Diesel Range Organics	n.a.	N.D.	3.0	mg/kg	1
02098	Heavy Range Organics	n.a.	N.D.	10.	mg/kg	1
02304	UST-Unleaded Soils by 8260B					
05460	Benzene	71-43-2	N.D.	0.0005	mg/kg	1.03
05466	Toluene	108-88-3	0.002	0.001	mg/kg	1.03
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	1.03
06301	Xylene (Total)	1330-20-7	0.001	0.001	mg/kg	1.03

State of Washington Lab Certification No. C259

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## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	08/15/2006 20:15	Scott W Freisher	1
02005	TPH by NWTPH-Gx soils	ECY 97-602 NWTPH-Gx modified	1	08/17/2006 10:14	Linda C Pape	26.71
02214	TPH by NWTPH-Dx(soils) w/SiGel	ECY 97-602 NWTPH-Dx modified	1	08/15/2006 06:10	Matthew E Barton	1
02304	UST-Unleaded Soils by 8260B	SW-846 8260B	1	08/21/2006 08:48	Stephanie A Selis	1.03
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035	1	08/15/2006 09:04	Stephanie A Sanchez	1



# Analysis Report

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Lancaster Laboratories Sample No. SW 4839836

MW-3@10' Grab Soil Sample  
Site# 256357 Proj# 01CP.02926.00  
3323 Marine Drive NE - Marysville, WA  
Collected: 08/09/2006 14:15 by KH

Account Number: 11817

Submitted: 08/11/2006 09:45  
Reported: 08/28/2006 at 11:19  
Discard: 09/28/2006

ConocoPhillips  
1230 West Washington Street  
Suite 212  
Tempe AZ 85281

MDM03							
02392	GC/MS - Field Preserved	SW-846 5035	2	08/15/2006 09:04	Stephanie A Sanchez	1	
	NaHSO4						
06647	GC Field Preserved MeOH	SW-846 5035	1	08/15/2006 08:52	Stephanie A Sanchez	n.a.	
07024	DRO Alternate Soil	ECY 97-602 NWTPH-Dx	1	08/14/2006 07:20	Ineabelle Poveda	1	
	Extraction	06/97					
07579	GC/MS-Field PreservedMeOH-NC	SW-846 5035	1	08/12/2006 18:04	Justin M Bowers	1	
07579	GC/MS-Field PreservedMeOH-NC	SW-846 5035	2	08/12/2006 18:05	Justin M Bowers	1	
07579	GC/MS-Field PreservedMeOH-NC	SW-846 5035	3	08/12/2006 18:06	Justin M Bowers	1	



# Analysis Report

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Lancaster Laboratories Sample No. SW 4839837

## MW-4@5' Grab Soil Sample

Site# 256357 Proj# 01CP.02926.00

3323 Marine Drive NE - Marysville, WA

Collected: 08/08/2006 12:55 by KH

Account Number: 11817

Submitted: 08/11/2006 09:45

Reported: 08/28/2006 at 11:19

Discard: 09/28/2006

ConocoPhillips

1230 West Washington Street

Suite 212

Tempe AZ 85281

MDM04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00111	Moisture	n.a.	3.2	0.50	%	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					
02005	TPH by NWTPH-Gx soils					
01659	TPH by NWTPH-Gx soils	n.a.	N.D.	1.2	mg/kg	28.87
	The analysis for volatiles was performed on a sample which was preserved in methanol. Therefore, the reporting limits were raised.					
02214	TPH by NWTPH-Dx(soils) w/SiGel					
02097	Diesel Range Organics	n.a.	N.D.	3.0	mg/kg	1
02098	Heavy Range Organics	n.a.	N.D.	10.	mg/kg	1
02304	UST-Unleaded Soils by 8260B					
05460	Benzene	71-43-2	N.D.	0.0005	mg/kg	1.09
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	1.09
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	1.09
06301	Xylene (Total)	1330-20-7	N.D.	0.001	mg/kg	1.09

State of Washington Lab Certification No. C259

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## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	08/15/2006 20:15	Scott W Freisher	1
02005	TPH by NWTPH-Gx soils	ECY 97-602 NWTPH-Gx modified	1	08/17/2006 10:50	Linda C Pape	28.87
02214	TPH by NWTPH-Dx(soils) w/SiGel	ECY 97-602 NWTPH-Dx modified	1	08/15/2006 06:30	Matthew E Barton	1
02304	UST-Unleaded Soils by 8260B	SW-846 8260B	1	08/21/2006 09:13	Stephanie A Selis	1.09
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035	1	08/15/2006 09:05	Stephanie A Sanchez	1
06647	GC Field Preserved MeOH	SW-846 5035	1	08/15/2006 08:53	Stephanie A Sanchez	n.a.



# Analysis Report

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Lancaster Laboratories Sample No. SW 4839837

MW-4@5' Grab Soil Sample

Site# 256357 Proj# 01CP.02926.00

3323 Marine Drive NE - Marysville, WA

Collected: 08/08/2006 12:55 by KH

Submitted: 08/11/2006 09:45

Reported: 08/28/2006 at 11:19

Discard: 09/28/2006

Account Number: 11817

ConocoPhillips

1230 West Washington Street

Suite 212

Tempe AZ 85281

MDM04

07024

DRO Alternate Soil

Extraction

ECY 97-602 NWTPH-Dx

06/97

1

08/14/2006 07:20

Ineabelle Poveda

1

07579

GC/MS-Field Preserved MeOH-  
NC

SW-846 5035

1

08/12/2006 18:07

Justin M Bowers

1



# Analysis Report

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Lancaster Laboratories Sample No. SW 4839838

## MW-5@5' Grab Soil Sample

Site# 256357 Proj# 01CP.02926.00

3323 Marine Drive NE - Marysville, WA

Collected: 08/08/2006 14:25 by KH

Account Number: 11817

Submitted: 08/11/2006 09:45

Reported: 08/28/2006 at 11:20

Discard: 09/28/2006

ConocoPhillips

1230 West Washington Street

Suite 212

Tempe AZ 85281

MDM05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00111	Moisture	n.a.	4.4	0.50	%	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					
02005	TPH by NWTPH-Gx soils					
01659	TPH by NWTPH-Gx soils	n.a.	N.D.	1.1	mg/kg	28.09
	The analysis for volatiles was performed on a sample which was preserved in methanol. Therefore, the reporting limits were raised.					
02214	TPH by NWTPH-Dx(soils) w/SiGel					
02097	Diesel Range Organics	n.a.	N.D.	3.0	mg/kg	1
02098	Heavy Range Organics	n.a.	N.D.	10.	mg/kg	1
02304	UST-Unleaded Soils by 8260B					
05460	Benzene	71-43-2	N.D.	0.0006	mg/kg	1.1
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	1.1
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	1.1
06301	Xylene (Total)	1330-20-7	N.D.	0.001	mg/kg	1.1

State of Washington Lab Certification No. C259

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## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	08/15/2006 20:15	Scott W Freisher	1
02005	TPH by NWTPH-Gx soils	ECY 97-602 NWTPH-Gx modified	1	08/17/2006 11:26	Linda C Pape	28.09
02214	TPH by NWTPH-Dx(soils) w/SiGel	ECY 97-602 NWTPH-Dx modified	1	08/15/2006 06:49	Matthew E Barton	1
02304	UST-Unleaded Soils by 8260B	SW-846 8260B	1	08/21/2006 09:38	Stephanie A Selis	1.1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035	1	08/15/2006 09:06	Stephanie A Sanchez	1
06647	GC Field Preserved MeOH	SW-846 5035	1	08/15/2006 08:54	Stephanie A Sanchez	n.a.



# Analysis Report

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Lancaster Laboratories Sample No. SW 4839838

MW-5@5' Grab Soil Sample  
Site# 256357 Proj# 01CP.02926.00  
3323 Marine Drive NE - Marysville, WA  
Collected: 08/08/2006 14:25 by KH

Account Number: 11817

ConocoPhillips  
1230 West Washington Street  
Suite 212  
Tempe AZ 85281

Submitted: 08/11/2006 09:45  
Reported: 08/28/2006 at 11:20  
Discard: 09/28/2006

MDM05						
07024	DRO Alternate Soil	ECY 97-602 NWTPH-Dx	1	08/14/2006 07:20	Ineabelle Poveda	1
	Extraction	06/97				
07579	GC/MS-Field PreservedMeOH-NC	SW-846 5035	1	08/12/2006 18:08	Justin M Bowers	1



# Analysis Report

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Lancaster Laboratories Sample No. SW 4839839

MW-6@10' Grab Soil Sample  
Site# 256357 Proj# 01CP.02926.00  
3323 Marine Drive NE - Marysville, WA  
Collected: 08/09/2006 10:00 by KH

Account Number: 11817

Submitted: 08/11/2006 09:45  
Reported: 08/28/2006 at 11:20  
Discard: 09/28/2006

ConocoPhillips  
1230 West Washington Street  
Suite 212  
Tempe AZ 85281

MDM06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00111	Moisture	n.a.	4.5	0.50	%	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					
02005	TPH by NWTPH-Gx soils					
01659	TPH by NWTPH-Gx soils	n.a.	N.D.	1.0	mg/kg	26.1
	The analysis for volatiles was performed on a sample which was preserved in methanol. Therefore, the reporting limits were raised.					
02214	TPH by NWTPH-Dx(soils) w/SiGel					
02097	Diesel Range Organics	n.a.	N.D.	3.0	mg/kg	1
02098	Heavy Range Organics	n.a.	N.D.	10.	mg/kg	1
02304	UST-Unleaded Soils by 8260B					
05460	Benzene	71-43-2	N.D.	0.0005	mg/kg	1
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	1
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	1
06301	Xylene (Total)	1330-20-7	N.D.	0.001	mg/kg	1

State of Washington Lab Certification No. C259

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	08/15/2006 20:15	Scott W Freisher	1
02005	TPH by NWTPH-Gx soils	ECY 97-602 NWTPH-Gx modified	1	08/17/2006 12:02	Linda C Pape	26.1
02214	TPH by NWTPH-Dx(soils) w/SiGel	ECY 97-602 NWTPH-Dx modified	1	08/15/2006 07:09	Matthew E Barton	1
02304	UST-Unleaded Soils by 8260B	SW-846 8260B	1	08/21/2006 10:02	Stephanie A Selis	1
02392	GC/MS - Field Preserved NaHSO4	SW-846 5035	1	08/15/2006 09:07	Stephanie A Sanchez	1



# Analysis Report

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Lancaster Laboratories Sample No. SW 4839839

MW-6@10' Grab Soil Sample  
Site# 256357 Proj# 01CP.02926.00  
3323 Marine Drive NE - Marysville, WA  
Collected: 08/09/2006 10:00 by KH

Account Number: 11817

ConocoPhillips  
1230 West Washington Street  
Suite 212  
Tempe AZ 85281

Submitted: 08/11/2006 09:45  
Reported: 08/28/2006 at 11:20  
Discard: 09/28/2006

MDM06							
02392	GC/MS - Field Preserved	SW-846 5035	2	08/15/2006 09:07	Stephanie A Sanchez	1	
	NaHSO4						
06647	GC Field Preserved MeOH	SW-846 5035	1	08/15/2006 08:55	Stephanie A Sanchez	n.a.	
07024	DRO Alternate Soil	ECY 97-602 NWTPH-Dx	1	08/14/2006 07:20	Ineabelle Poveda	1	
	Extraction	06/97					
07579	GC/MS-Field PreservedMeOH-	SW-846 5035	1	08/12/2006 18:09	Justin M Bowers	1	
	NC						
07579	GC/MS-Field PreservedMeOH-	SW-846 5035	2	08/12/2006 18:10	Justin M Bowers	1	
	NC						
07579	GC/MS-Field PreservedMeOH-	SW-846 5035	3	08/12/2006 18:13	Justin M Bowers	1	
	NC						